



# ***STIC Search Report***

**EIC 1700**

**STIC Database Tracking Number: 167802**

**TO: Eisa Elhilo  
Location: REM 9A60  
Art Unit : 1751  
October 7, 2005**

**Case Serial Number: 10/661609**

**From: Usha Shrestha  
Location: EIC 1700  
REMSSEN 4B28  
Phone: 571/272-3519  
usha.shrestha@uspto.gov**

## **Search Notes**



# STIC Search Results Feedback Form

**EIC17000**

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader  
571/272-2505 REMSEN 4B28

## Voluntary Results Feedback Form

- I am an examiner in Workgroup:  Example: 1713  
➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

- Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28



=> fil reg

FILE 'REGISTRY' ENTERED AT 11:42:22 ON 07 OCT 2005

=> d his

FILE 'HCAPLUS' ENTERED AT 09:15:54 ON 07 OCT 2005

L1 1 S US20050015896/PN  
SEL RN

FILE 'REGISTRY' ENTERED AT 09:16:20 ON 07 OCT 2005

L2 17 S E1-E17

FILE 'LREGISTRY' ENTERED AT 09:32:52 ON 07 OCT 2005

L3 STR

FILE 'REGISTRY' ENTERED AT 09:51:31 ON 07 OCT 2005

L4 50 S L3

FILE 'LREGISTRY' ENTERED AT 09:53:15 ON 07 OCT 2005

L5 STR L3

FILE 'REGISTRY' ENTERED AT 09:58:02 ON 07 OCT 2005

L6 50 S L5

FILE 'LREGISTRY' ENTERED AT 10:03:06 ON 07 OCT 2005

L7 STR L5

FILE 'REGISTRY' ENTERED AT 10:05:45 ON 07 OCT 2005

L8 48 S L7

L9 STR L5

L10 50 S L9

L11 STR L7

L12 50 S L11

L13 71845 S L9 FUL

L14 0 S L13 AND L2

SAV L14 ELH609/A

FILE 'HCAPLUS' ENTERED AT 10:47:45 ON 07 OCT 2005

L15 27718 S L13

L16 174 S L15 (L) HAIR? (A) DYE?

L17 173 S L16 AND COSMETIC?/SC, SX

L18 121 S L17 AND COMPOSITION?

L19 76 S L15 (L) HAIR? (A) DYE? (5A) COMPOSITION?

L20 76 S L19 AND COSMETIC?/SC, SX

L21 76 S L20 AND P/DT

L22 68 S L21 AND (1907-2002)/PRY, AY

L23 82 S L15 (L) (HAIR? OR KERAT?) (A) DYE? (5A) COMPOSITION?

L24 81 S L23 AND COSMETIC?/SC

L25 81 S L24 AND P/DT

L26 74 S L25 AND (1907-2002)/PRY, AY

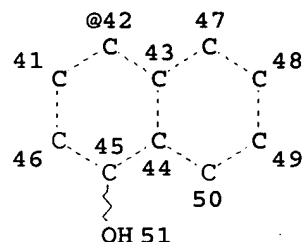
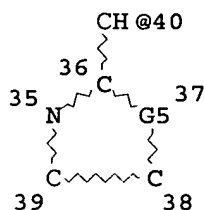
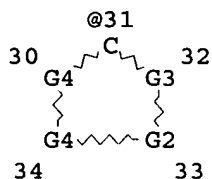
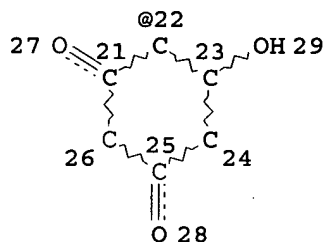
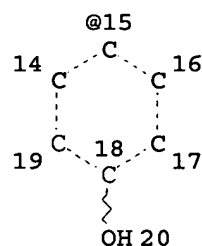
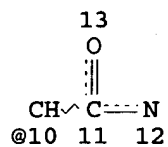
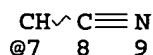
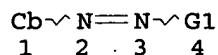
SEL L26 HIT RN 1-

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FILE 'HCAPLUS' ENTERED AT 11:39:43 ON 07 OCT 2005

=> d que 126

L9 STR



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 VAR G2=N/S/C  
 VAR G3=C/O/S/N  
 VAR G4=N/C  
 VAR G5=O/S/N  
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 CONNECT IS E1 RC AT 9  
 CONNECT IS E1 RC AT 12  
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 DEFAULT ECLEVEL IS LIMITED  
 ECOUNT IS M6-X10 C AT 1

GRAPH ATTRIBUTES:  
 RSPEC 14 41  
 NUMBER OF NODES IS 49

STEREO ATTRIBUTES: NONE

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 L15 27718 SEA FILE=HCAPLUS ABB=ON PLU=ON L13  
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 KERAT?) (A) DYE? (5A) COMPOSITION?  
 L24 81 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 AND COSMETIC?/SC  
 L25 81 SEA FILE=HCAPLUS ABB=ON PLU=ON L24 AND P/DT  
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=> d l26 1-74 ibib abs hitstr hitind

L26 ANSWER 1 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2004:512208 HCAPLUS  
 DOCUMENT NUMBER: 141:76343  
 TITLE: Hair dye compositions containing a  
 dissymmetric polycationic direct dye



INVENTOR(S): Lagrange, Alain  
 PATENT ASSIGNEE(S): L'oreal, Fr.  
 SOURCE: Fr. Demande, 65 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2848839	A1	20040625	FR 2002-16566	2002 1223
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FR 2848839	B1	20050311		
EP 1433474	A1	20040630	EP 2003-293292	2003 1223
			<--	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004187228	A1	20040930	US 2003-742842	2003 1223
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JP 2004204237	A2	20040722	JP 2003-428264	2003 1224
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PRIORITY APPLN. INFO.:			FR 2002-16566	A 2002 1223
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			US 2003-468637P	P 2003 0508

OTHER SOURCE(S): MARPAT 141:76343

AB The dyeing of human keratin fibers and more particularly of the human hair comprises a direct tricationic dye containing e.g., azomethine, phenothiazine, triarylmethane, or xanthene groups. Thus, a formulation contained chloronitrophenylazo group-containing polycationic dye 0.74, oleic acid diethanolamide 3, lauric acid 1, ethylene glycol monoethyl ether 5, hydroxyethyl cellulose 2, 2-amino-2-methyl-1-propanol 9.5, and water qs to 100 g.

IT 31949-81-2

(hair dye compns. containing dissym.  
polycationic direct dye)

RN 31949-81-2 HCAPLUS

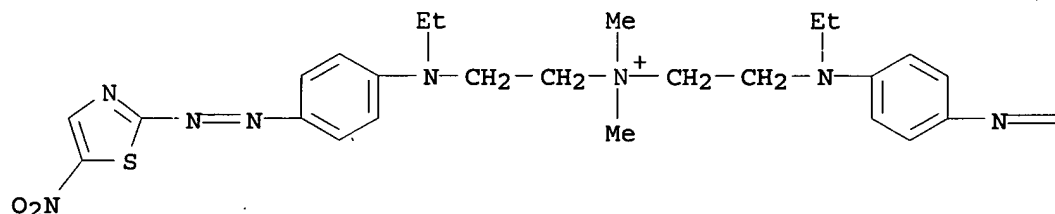
CN Ethanaminium, N-[2-[[4-[[2-chloro-4-(methylsulfonyl)phenyl]azo]phenyl]ethylamino]ethyl]-2-[ethyl[4-[(5-nitro-2-thiazolyl)azo]phenyl]amino]-N,N-dimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

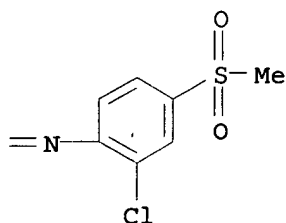
CRN 47870-78-0

CMF C32 H39 Cl N9 O4 S2

PAGE 1-A

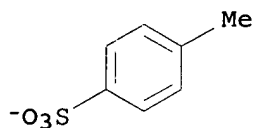


PAGE 1-B



CM 2

CRN 16722-51-3  
 CMF C7 H7 O3 S



IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 95-55-6D, o-Aminophenol, derivs. 106-50-3, p-Phenylenediamine, biological studies 108-45-2D, m-Phenylenediamine, derivs. 108-46-3D, Resorcinol, derivs. 123-30-8D, p-Aminophenol, derivs. 574-93-6D, Phthalocyanine, derivs. 591-27-5D, m-Aminophenol, derivs. 7722-84-1, Hydrogen peroxide, biological studies  
 31949-81-2 150282-41-0 153087-71-9 169454-19-7  
 170965-04-5 170965-05-6 170965-11-4 170965-12-5  
 170965-13-6 170965-14-7 170965-15-8 170965-16-9  
 171018-24-9 171018-25-0 171018-27-2 177597-80-7  
 177597-81-8 177597-82-9 710290-69-0 710290-71-4  
 (hair dye compns. containing dissym. polycationic direct dye)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

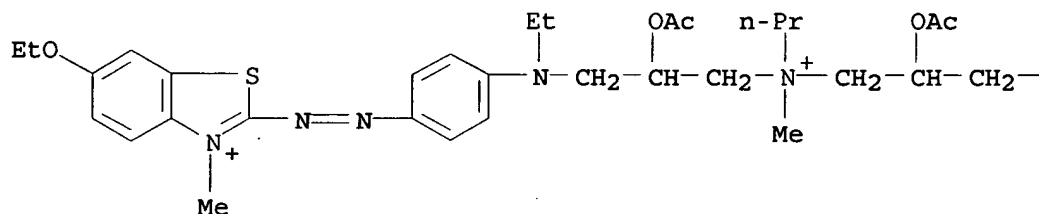
ACCESSION NUMBER: 2004:512207 HCAPLUS  
 DOCUMENT NUMBER: 141:76342  
 TITLE: Hair dye compositions containing a tricationic direct dye  
 INVENTOR(S): Lagrange, Alain  
 PATENT ASSIGNEE(S): L'oreal, Fr.  
 SOURCE: Fr. Demande, 57 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2848838	A1	20040625	FR 2002-16565	2002 1223
FR 2848838	B1	20050311	<--	
EP 1433472	A1	20040630	EP 2003-293290	2003 1223
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US 2004187227	A1	20040930	US 2003-742801	2003 1223
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JP 2004210777	A2	20040729	JP 2003-428263	2003 1224
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PRIORITY APPLN. INFO.:			FR 2002-16565	A 2002 1223
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			US 2003-468735P	P 2003 0508

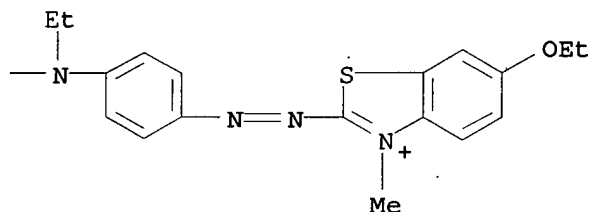
OTHER SOURCE(S): MARPAT 141:76342

AB The dyeing of human keratin fibers and more particularly of the human hair comprises a direct tricationic dye containing e.g., azomethine, phenothiazine, triarylmethane, or xanthene groups. Thus, a formulation contained a tricationic benzothiazolium dye 1.06, oleic acid diethanolamide 3, lauric acid 1, ethylene glycol monoethyl ether 5, hydroxyethyl cellulose 2, 2-amino-2-methyl-1-propanol 9.5, and water qs to 100 g.  
 IT 41681-41-8  
 (hair dye compns. containing tricationic direct dye)  
 RN 41681-41-8 HCAPLUS  
 CN Benzothiazolium, 2,2'-[(methylpropyliminio)bis[[2-(acetyloxy)-3,1-propanediyl](ethylimino)-4,1-phenyleneazo]]bis[6-ethoxy-3-methyl-, trichloride (9CI) (CA INDEX NAME)

PAGE 1-A

● 3 Cl<sup>-</sup>

PAGE 1-B



IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 95-55-6D, o-Aminophenol, derivs. 106-50-3D, p-Phenylenediamine, derivs. 108-45-2D, m-Phenylenediamine, derivs. 108-46-3D, Resorcinol, derivs. 123-30-8D, p-Aminophenol, derivs. 574-93-6D, Phthalocyanine, derivs. 591-27-5D, m-Aminophenol, derivs. 7722-84-1, Hydrogen peroxide, biological studies 41681-41-8 107004-44-4 107032-39-3 (hair dye compns. containing tricationic direct dye)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 3 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2004:512206 HCAPLUS  
 DOCUMENT NUMBER: 141:76341  
 TITLE: Hair dye compositions containing a polycationic direct dye  
 INVENTOR(S): Lagrange, Alain  
 PATENT ASSIGNEE(S): L'oreal, Fr.  
 SOURCE: Fr. Demande, 65 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2848837	A1	20040625	FR 2002-16564	

2002  
1223

EP 1433473 A1 20040630 EP 2003-293291

2003  
1223

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,  
EE, HU, SK

US 2004194229 A1 20041007 US 2003-742841

2003  
1223

JP 2004203888 A2 20040722 JP 2003-428262

2003  
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PRIORITY APPLN. INFO.:

FR 2002-16564 A

2002  
1223

US 2003-468734P P

2003  
0508

OTHER SOURCE(S): MARPAT 141:76341

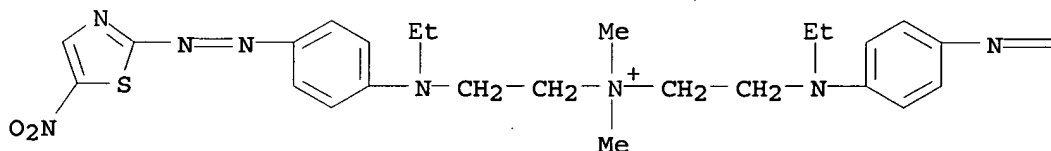
AB The dyeing of human keratin fibers and more particularly of the human hair comprises a direct polycationic dye containing e.g., azomethine, phenothiazine, triarylmethane, or xanthene groups. Thus, a formulation contained an imidazolium azo dye 0.70, benzyl alc. 4.0, PEG 6.0, alkyl polyglucoside 4.5, phosphate buffer qs, and water qs to 100 g.

IT 710339-24-5 710339-26-7  
(hair dye compns. containing polycationic direct dye)

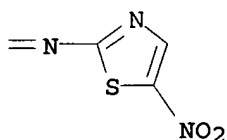
RN 710339-24-5 HCAPLUS

CN Ethanaminium, 2-[ethyl[4-[(5-nitro-2-thiazolyl)azo]phenyl]amino]-N-[2-[ethyl[4-[(5-nitro-2-thiazolyl)azo]phenyl]amino]ethyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A

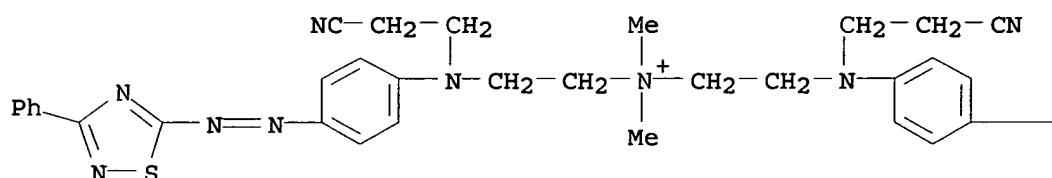


PAGE 1-B

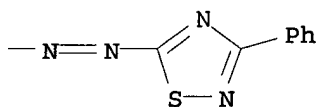


RN 710339-26-7 HCAPLUS  
 CN Ethanaminium, 2-[(2-cyanoethyl)[4-[(3-phenyl-1,2,4-thiadiazol-5-yl)azo]phenyl]amino]-N-[2-[(2-cyanoethyl)[4-[(3-phenyl-1,2,4-thiadiazol-5-yl)azo]phenyl]amino]ethyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 95-55-6D, o-Aminophenol, derivs. 106-50-3D, p-Phenylenediamine, derivs. 108-45-2D, m-Phenylenediamine, derivs. 108-46-3D, Resorcinol, derivs. 123-30-8D, p-Aminophenol, derivs. 574-93-6D, Phthalocyanine, derivs. 591-27-5D, m-Aminophenol, derivs. 7722-84-1, Hydrogen peroxide, biological studies  
 29452-77-5 39875-15-5 39875-16-6 39875-17-7 39875-18-8  
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 39875-27-9 39944-42-8 41681-37-2 106714-48-1 107684-38-8  
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 710339-30-3 710339-31-4

(hair dye compns. containing polycationic direct dye)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 4 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:510121 HCAPLUS

DOCUMENT NUMBER: 141:59180

TITLE: Use of 4-N,N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivatives in hair dyeing compositions

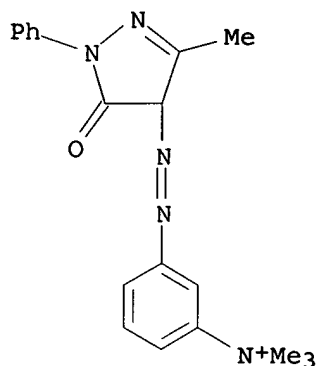
INVENTOR(S): Hoeffkes, Horst; Seiler, Martina; Cortekar,

PATENT ASSIGNEE(S): Birgitta  
 Henkel Kommanditgesellschaft Auf Aktien,  
 Germany  
 SOURCE: Eur. Pat. Appl., 33 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1430874	A2	20040623	EP 2003-28615	2003 1211
EP 1430874	A3	20041027		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10259849	A1	20040708	DE 2002-10259849	2002 1220
PRIORITY APPLN. INFO.: DE 2002-10259849 A				

OTHER SOURCE(S): MARPAT 141:59180

AB The invention concerns hair dyes that contain 4-N,N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs., especially 4-N,N-Bis(2-hydroxypropyl)amino-3-nitrophenol. The compns. further can contain direct dyes, surfactants, amino acids, oligopeptides, amines, N-containing heterocycles and aromatic hydroxyl compds. Thus a formulation included (weight/weight%): Texapon NSO 15.0; Lorol 5.0; Polychol 5 1.2; Dow Corning 345EU 0.1; Mirapol A15; Lipoxol 400 MED 5.0; Luviskol K30 0.5; sodium hydrogen carbonate 0.5; Nutrilan Keratin W 0.3; 4-N,N-Bis(2-hydroxypropyl)amino-3-nitrophenol 0,4; Violet 1.4 D 0.2; Rodol 9R Base 0.2; HC Red 3 0.4; perfume 0.3; water to 96; propellant 4.0,.  
 IT 68391-31-1, Basic Yellow 57  
 (use of 4-N,N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs. in hair dyeing compns.)  
 RN 68391-31-1 HCAPLUS  
 CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

IC ICM A61K007-13  
 CC 62-3 (Essential Oils and **Cosmetics**)  
 IT 112-02-7, Dehyquart A 124-68-5, AMP 95 610-81-1D,  
 4-Amino-3-nitrophenol, N,N-Bis(monohydroxyalkyl) derivs.  
 632-99-5, Basic Violet 14 633-96-5, Acid Orange 7 1064-48-8,  
 Acid Black 1 2390-60-5, Basic Blue 7 2784-89-6, HC red 1  
 2871-01-4, HC Red 3 3520-42-1, Acid Red 52 3567-66-6, Acid Red  
 33 4430-18-6, Acid Violet 43 4926-55-0, HC yellow 2  
 6358-09-4, Rodol 9R Base 9004-82-4, Texapon NSO 12270-25-6,  
 Basic Red 51 25322-68-3, Lipoxol 400MED 26062-79-3, Merquat  
 100 26381-41-9, Basic Brown 16 32208-04-1, Dehyquart F75  
 33229-34-4, HC blue 2 33939-64-9, Akypo RLM 45N 53694-17-0,  
 Merquat 280 53988-60-6, Aminoxid WS 35 54381-08-7, HC orange 1  
 56932-44-6, HC yellow 5 61901-61-9, Basic Orange 31  
 63451-27-4, Mirapol A15 68123-13-7, Basic Blue 99 68391-30-0,  
 Basic Red 76 68391-31-1, Basic Yellow 57 83138-08-3,  
 Dehyton K 84041-77-0 92952-81-3, HC red BN 103300-27-2,  
 Aminol A15 116844-55-4, Basic Yellow 87 176742-32-8, Basic  
 Brown 17 625836-51-3  
 (use of 4-N,N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs.  
 in hair dyeing compns.)

L26 ANSWER 5 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:482160 HCAPLUS

DOCUMENT NUMBER: 141:42533

TITLE: Hair dyeing compositions comprising a cationic  
 tertiary p-phenylenediamine with a pyrrolidine  
 ring and a cationic heterocyclic direct dye

INVENTOR(S): Cotteret, Jean; Lagrange, Alain

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Eur. Pat. Appl., 104 pp.

CODEN: EPXXDW

DOCUMENT TYPE: **Patent**

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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 EP 1428505                      A1            20040616            EP 2003-293130  
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 EE, HU, SK

FR 2848439                      A1            20040618            FR 2002-15772  
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 US 2004221399                      A1            20041111            US 2003-735259  
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 PRIORITY APPLN. INFO.:                      FR 2002-15772            A  
2002  
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 US 2003-444641P                      P  
2003  
0204

OTHER SOURCE(S):                      MARPAT 141:42533

AB Hair dyeing compns. comprise a cationic tertiary  
 p-phenylenediamine with a pyrrolidine ring and a cationic  
 heterocyclic direct dye. Thus, a composition contained oleic acid 9,  
 polyglyceryl oleyl ether 12, diethylaminopropyl  
 laurylamino succinamate sodium salt 3, ethoxylated oleylamine 7,  
 ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20,  
 propylene glycol 20, dilinoleic acid 1.5, reducing agents 0.915,  
 sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-  
 yl]trimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5,  
 niacinamide 0.2, perfume qs, ammonia 10.2, and water qs to 100 g.  
 The above composition (50 g) was mixed with oxygenated water and 0.2 g  
 Basic Red-51.

IT 178822-20-3 188006-49-7 477952-17-3  
 477952-18-4 477952-19-5 477952-20-8  
 477952-21-9 478239-95-1 478239-96-2  
 478239-99-5 478240-00-5 478240-01-6  
 478240-02-7 478240-03-8 478240-04-9  
 478240-05-0 478240-06-1 478240-07-2  
 478240-08-3 478240-09-4 478240-10-7  
 478240-11-8 478240-48-1 478242-96-5  
 503091-83-6 704885-69-8 704885-70-1  
 704885-71-2 704885-72-3 704885-73-4  
 704885-74-5 704885-75-6 704885-76-7  
 704885-77-8 704885-78-9 704885-79-0  
 704885-80-3 704885-81-4 704885-82-5  
 704885-83-6 704885-84-7 704885-85-8  
 704885-86-9 704885-87-0 704885-88-1  
 704885-89-2 704885-90-5 704885-91-6  
 704885-92-7 704885-93-8 704885-94-9  
 704885-95-0 704885-96-1 704885-97-2  
 704885-98-3 704885-99-4 704886-00-0  
 704886-01-1 704886-02-2 704886-03-3  
 704886-04-4 704886-05-5 704886-06-6  
 704886-07-7 704886-08-8 704886-09-9  
 704886-10-2 704886-11-3 704886-12-4

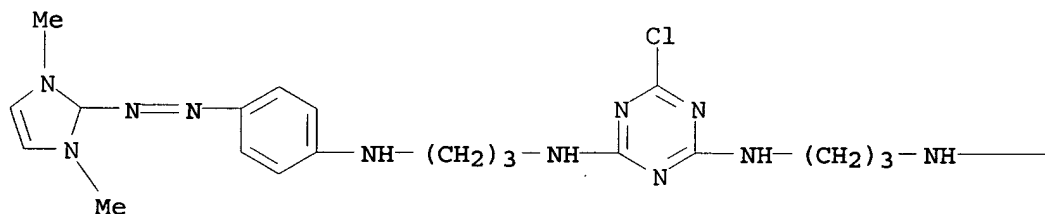
704886-13-5

(hair dyeing compns. comprising  
cationic tertiary phenylenediamine with pyrrolidine ring and  
cationic heterocyclic direct dye)

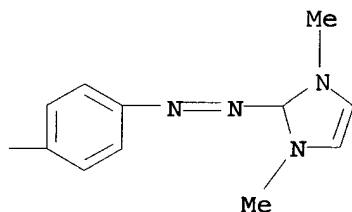
RN 178822-20-3 HCAPLUS

CN 1H-Imidazolium, 2,2'-[(6-chloro-1,3,5-triazine-2,4-diyl)bis(imino-  
3,1-propanediylimino-4,1-phenyleneazo)]bis[1,3-dimethyl-,  
dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

● 2 Cl<sup>-</sup>

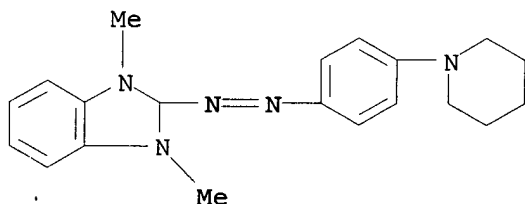
PAGE 1-B



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 188006-49-7 HCAPLUS

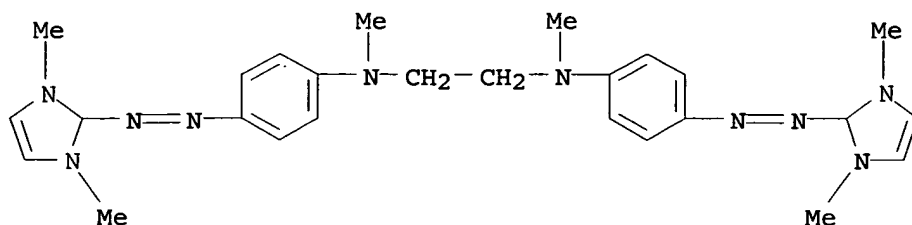
CN 1H-Benzimidazolium, 1,3-dimethyl-2-[[4-(1-piperidinyl)phenyl]azo]-  
(9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 477952-17-3 HCAPLUS

CN 1H-Imidazolium, 2,2'-[1,2-ethanediylbis[(methylimino)-4,1-  
phenyleneazo]]bis[1,3-dimethyl-, dichloride (9CI) (CA INDEX NAME)



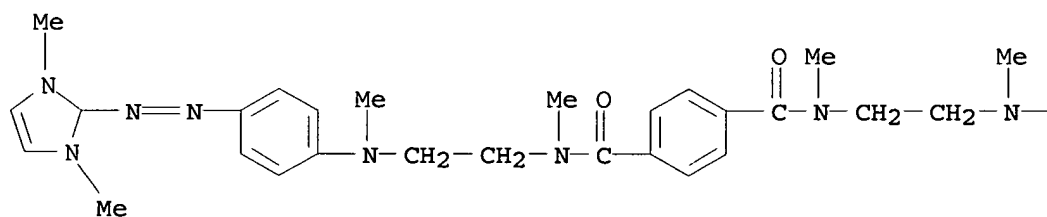
● 2 Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 477952-18-4 HCAPLUS

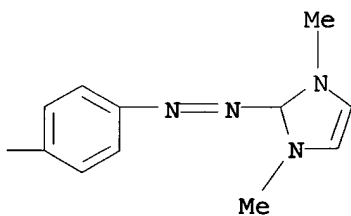
CN 1H-Imidazolium, 2,2'-[1,4-phenylenebis(carbonyl(methylimino)-2,1-ethanediyl(methylimino)-4,1-phenyleneazo)]bis[1,3-dimethyl-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



● 2 Cl<sup>-</sup>

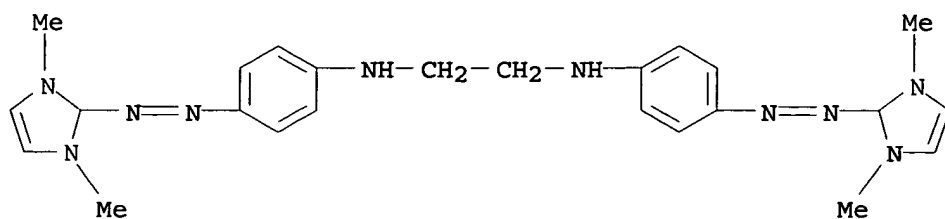
PAGE 1-B



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 477952-19-5 HCAPLUS

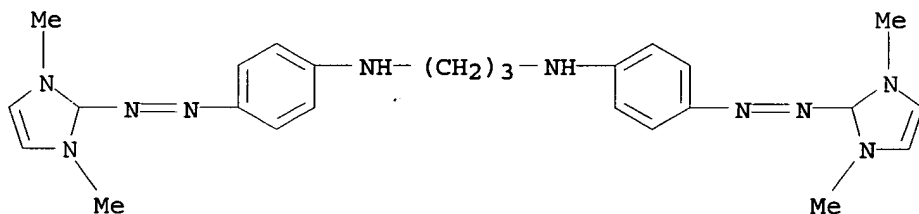
CN 1H-Imidazolium, 2,2'-[1,2-ethanediylbis(imino-4,1-phenyleneazo)]bis[1,3-dimethyl-, dichloride (9CI) (CA INDEX NAME)

●2 Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 477952-20-8 HCAPLUS

CN 1H-Imidazolium, 2,2'-[1,3-propanediylbis(imino-4,1-phenyleneazo)]bis[1,3-dimethyl-, dichloride (9CI) (CA INDEX NAME)

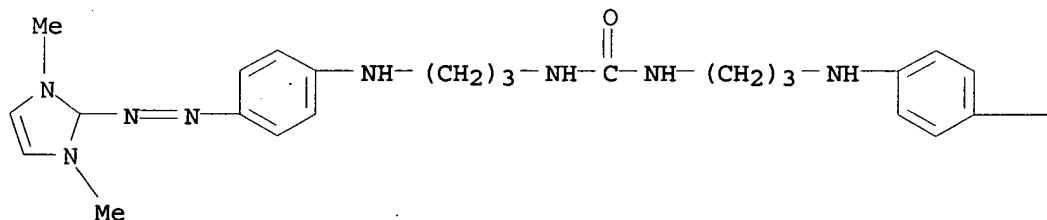
●2 Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

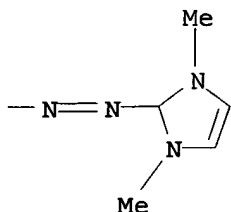
RN 477952-21-9 HCAPLUS

CN 1H-Imidazolium, 2,2'-[carbonylbis(imino-3,1-propanediylimino-4,1-phenyleneazo)]bis[1,3-dimethyl-, dichloride (9CI) (CA INDEX NAME)

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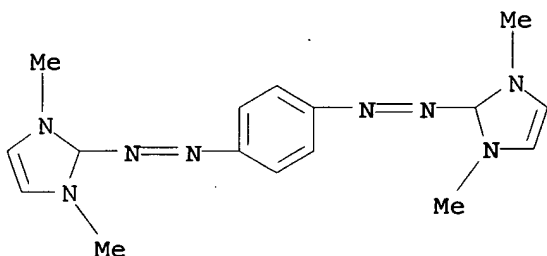
●2 Cl<sup>-</sup>

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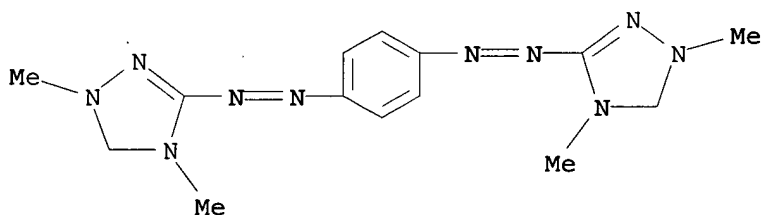
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478239-95-1 HCAPLUS

CN 1H-Imidazolium, 2,2'-[1,4-phenylenebis(azo)]bis[1,3-dimethyl-  
(9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

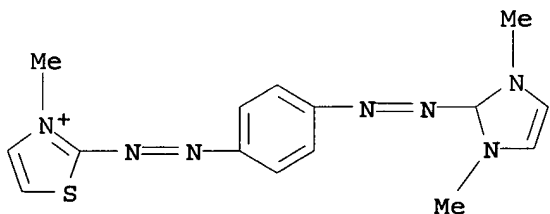
RN 478239-96-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 3,3'-[1,4-phenylenebis(azo)]bis[1,4-dimethyl-  
(9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478239-99-5 HCAPLUS

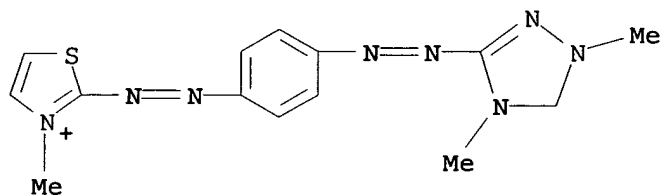
CN Thiazolium, 2-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]phenyl]azo]-3-methyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-00-5 HCAPLUS

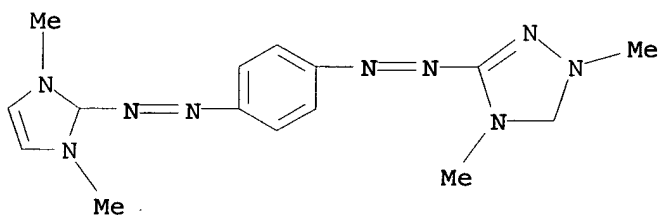
CN 1H-1,2,4-Triazolium, 1,4-dimethyl-3-[[4-[(3-methylthiazolium-2-yl)azo]phenyl]azo]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-01-6 HCAPLUS

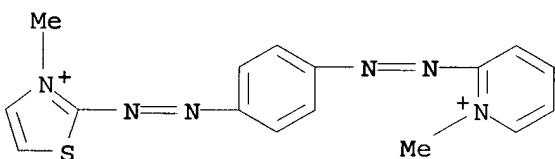
CN 1H-1,2,4-Triazolium, 3-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]phenyl]azo]-1,4-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

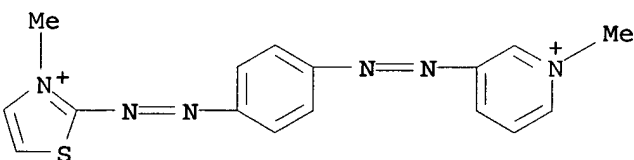
RN 478240-02-7 HCAPLUS

CN Pyridinium, 1-methyl-2-[[4-[(3-methylthiazolium-2-yl)azo]phenyl]azo]- (9CI) (CA INDEX NAME)



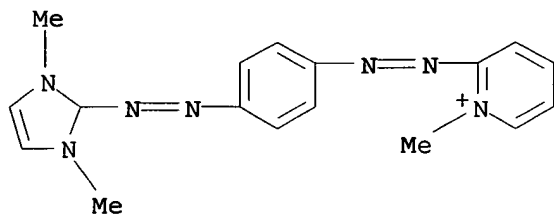
RN 478240-03-8 HCAPLUS

CN Pyridinium, 1-methyl-3-[[4-[(3-methylthiazolium-2-yl)azo]phenyl]azo]- (9CI) (CA INDEX NAME)



RN 478240-04-9 HCAPLUS

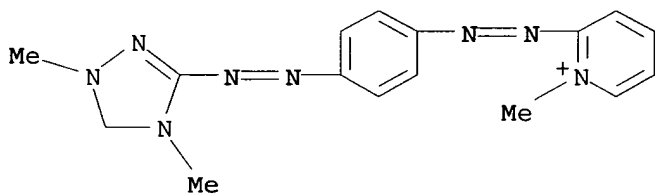
CN Pyridinium, 2-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]phenyl]azo]-1-methyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-05-0 HCAPLUS

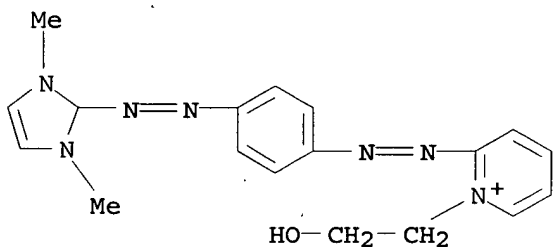
CN Pyridinium, 2-[[4-[(1,4-dimethyl-1H-1,2,4-triazolium-3-yl)azo]phenyl]azo]-1-methyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-06-1 HCAPLUS

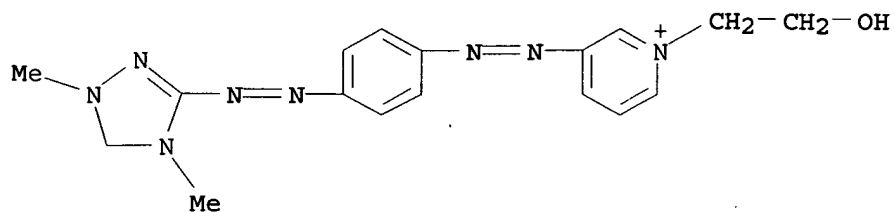
CN Pyridinium, 2-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]phenyl]azo]-1-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-07-2 HCAPLUS

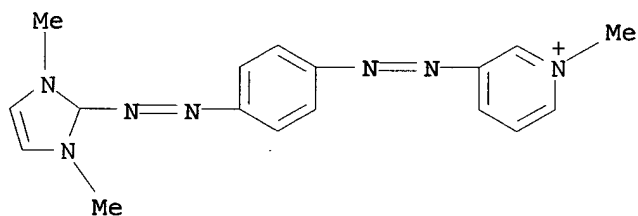
CN Pyridinium, 3-[[4-[(1,4-dimethyl-1H-1,2,4-triazolium-3-yl)azo]phenyl]azo]-1-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-08-3 HCAPLUS

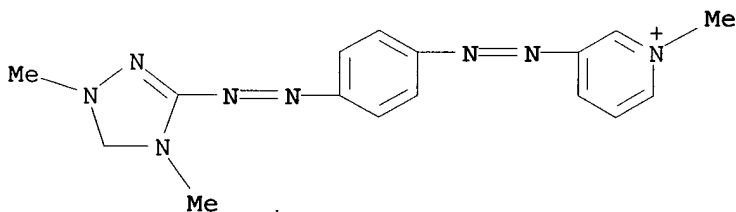
CN Pyridinium, 3-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]phenyl]azo]-1-methyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-09-4 HCAPLUS

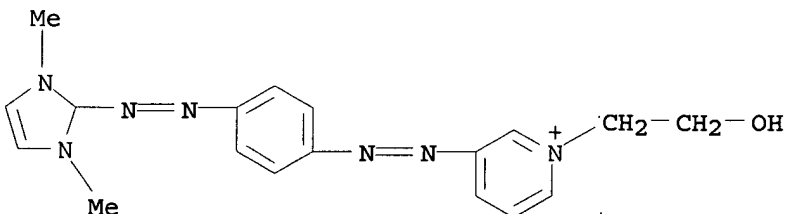
CN Pyridinium, 3-[[4-[(1,4-dimethyl-1H-1,2,4-triazolium-3-yl)azo]phenyl]azo]-1-methyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-10-7 HCAPLUS

CN Pyridinium, 3-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]phenyl]azo]-1-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

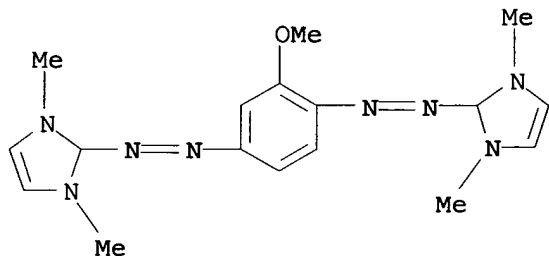


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE



RN 478240-11-8 HCAPLUS

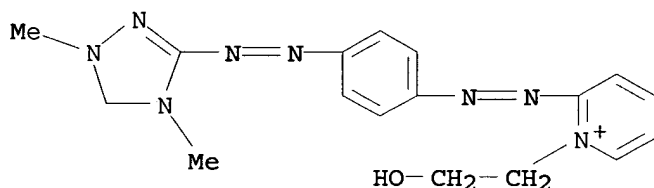
CN 1H-Imidazolium, 2,2'-[(2-methoxy-1,4-phenylene)bis(azo)]bis[1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-48-1 HCAPLUS

CN Pyridinium, 2-[[4-[(1,4-dimethyl-1H-1,2,4-triazolium-3-yl)azo]phenyl]azo]-1-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

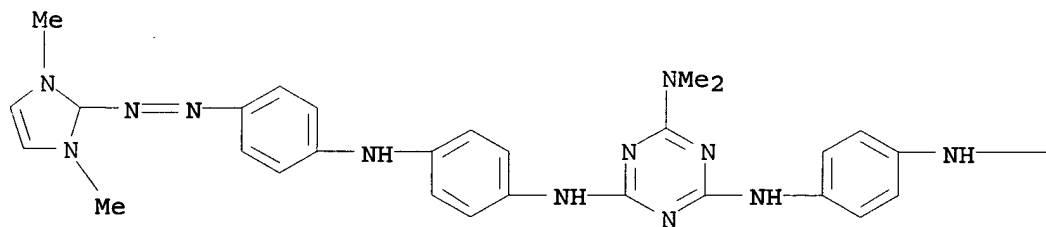


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

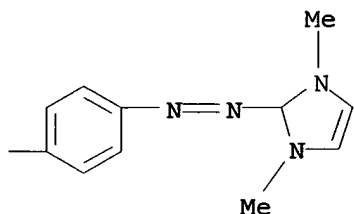
RN 478242-96-5 HCAPLUS

CN 1H-Imidazolium, 2,2'-[[6-(dimethylamino)-1,3,5-triazine-2,4-diyl]bis(imino-4,1-phenyleneimino-4,1-phenyleneazo)]bis[1,3-dimethyl- (9CI) (CA INDEX NAME)

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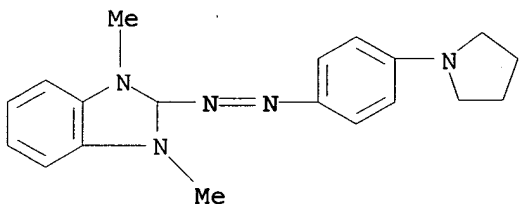


PAGE 1-B



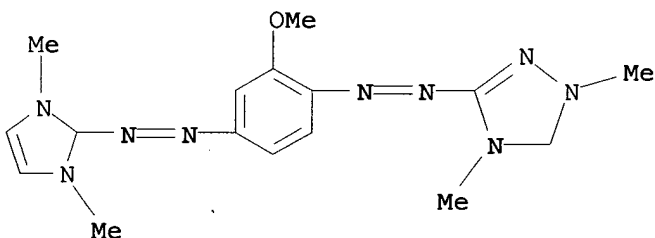
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 503091-83-6 HCAPLUS

CN 1H-Benzimidazolium, 1,3-dimethyl-2-[[4-(1-pyrrolidinyl)phenyl]azo]-  
(9CI) (CA INDEX NAME)

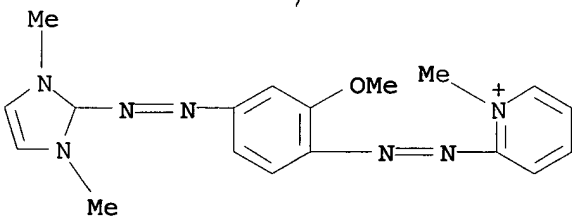
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-69-8 HCAPLUS

CN 1H-1,2,4-Triazolium, 3-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]-  
2-methoxyphenyl]azo]-1,4-dimethyl- (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

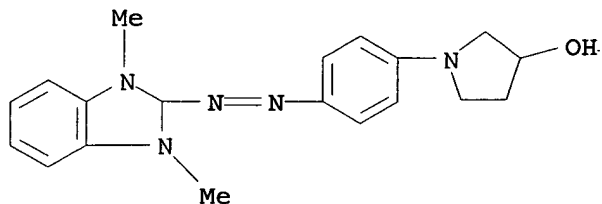
RN 704885-70-1 HCAPLUS

CN Pyridinium, 2-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]-2-  
methoxyphenyl]azo]-1-methyl- (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-71-2 HCAPLUS

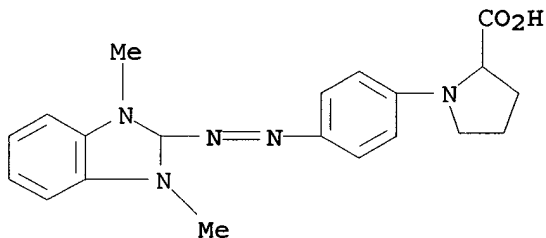
CN 1H-Benzimidazolium, 2-[[4-(3-hydroxy-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-72-3 HCAPLUS

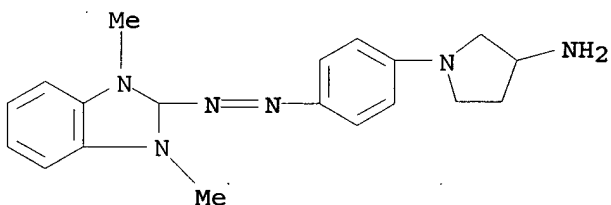
CN 1H-Benzimidazolium, 2-[[4-(2-carboxy-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-73-4 HCAPLUS

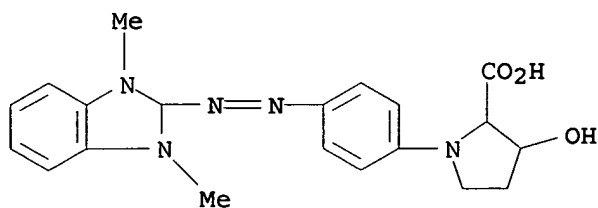
CN 1H-Benzimidazolium, 2-[[4-(3-amino-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-74-5 HCAPLUS

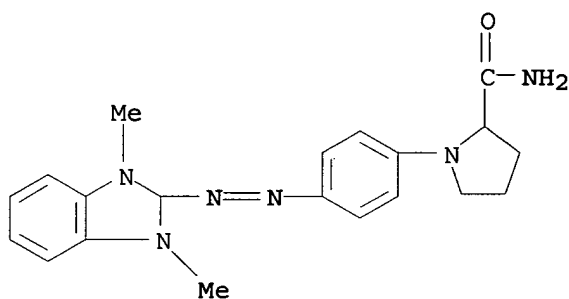
CN 1H-Benzimidazolium, 2-[[4-(2-carboxy-3-hydroxy-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-75-6 HCAPLUS

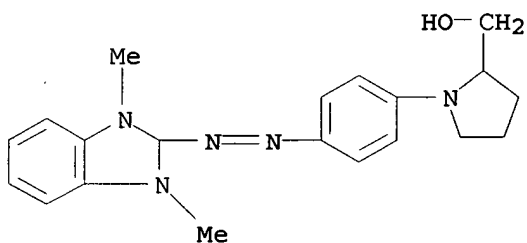
CN 1H-Benzimidazolium, 2-[[4-[2-(aminocarbonyl)-1-pyrrolidinyl]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-76-7 HCAPLUS

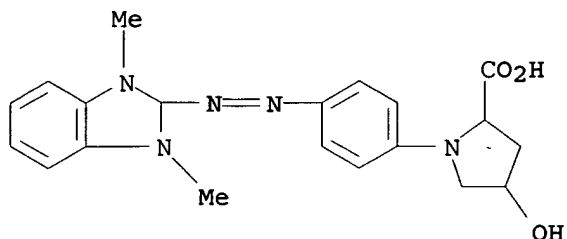
CN 1H-Benzimidazolium, 2-[[4-[2-(hydroxymethyl)-1-pyrrolidinyl]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-77-8 HCAPLUS

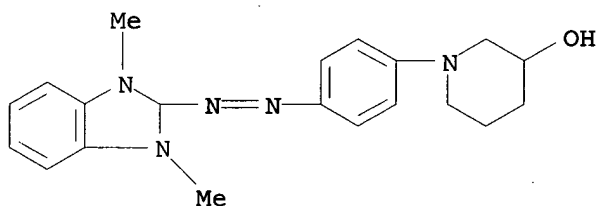
CN 1H-Benzimidazolium, 2-[[4-(2-carboxy-4-hydroxy-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-78-9 HCAPLUS

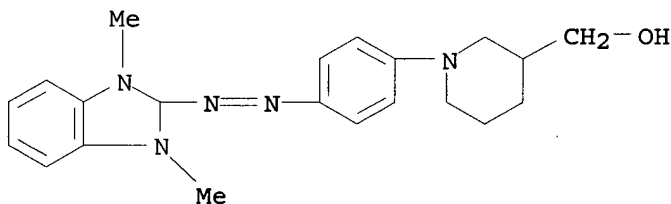
CN 1H-Benzimidazolium, 2-[[4-(3-hydroxy-1-piperidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-79-0 HCAPLUS

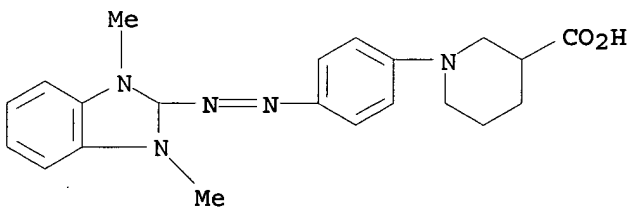
CN 1H-Benzimidazolium, 2-[[4-[3-(hydroxymethyl)-1-piperidinyl]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-80-3 HCAPLUS

CN 1H-Benzimidazolium, 2-[[4-(3-carboxy-1-piperidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)

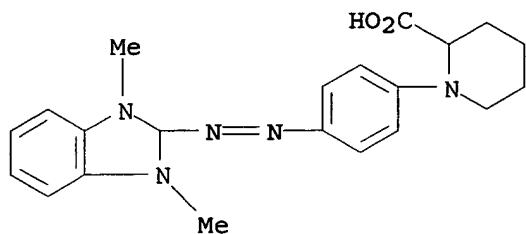


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-81-4 HCAPLUS

CN 1H-Benzimidazolium, 2-[[4-(2-carboxy-1-piperidinyl)phenyl]azo]-1,3-

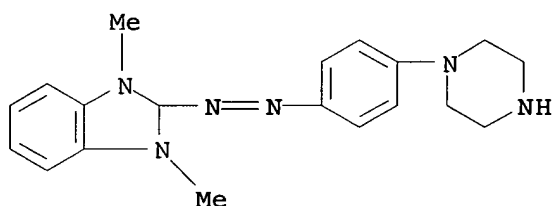
dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-82-5 HCAPLUS

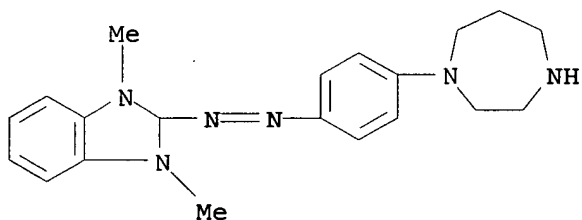
CN 1H-Benzimidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-83-6 HCAPLUS

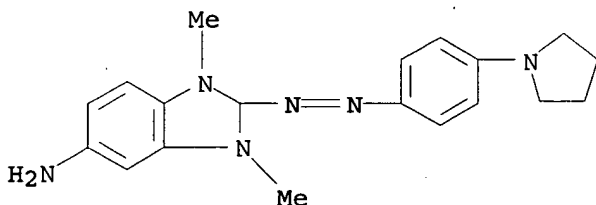
CN 1H-Benzimidazolium, 2-[[4-(hexahydro-1H-1,4-diazepin-1-yl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

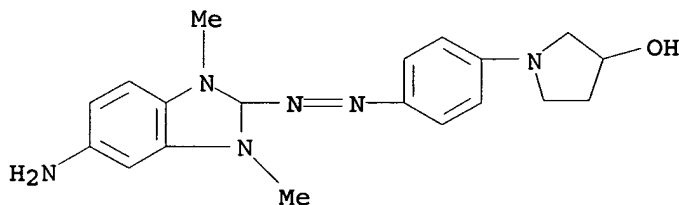
RN 704885-84-7 HCAPLUS

CN 1H-Benzimidazolium, 5-amino-1,3-dimethyl-2-[[4-(1-pyrrolidinyl)phenyl]azo]- (9CI) (CA INDEX NAME)



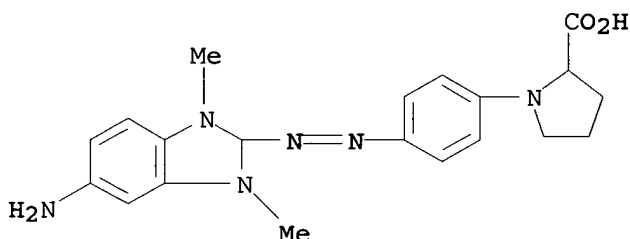
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-85-8 HCAPLUS  
CN 1H-Benzimidazolium, 5-amino-2-[[4-(3-hydroxy-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



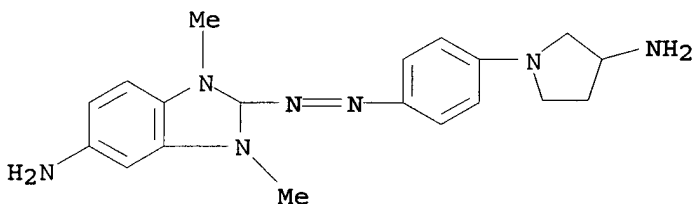
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-86-9 HCAPLUS  
CN 1H-Benzimidazolium, 5-amino-2-[[4-(2-carboxy-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



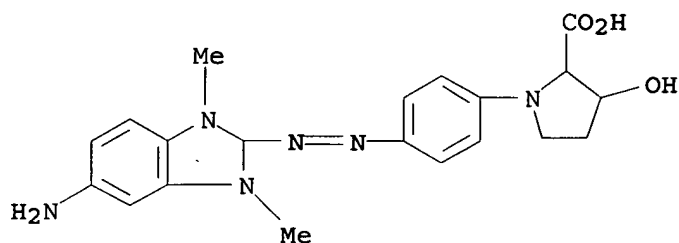
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-87-0 HCAPLUS  
CN 1H-Benzimidazolium, 5-amino-2-[[4-(3-amino-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

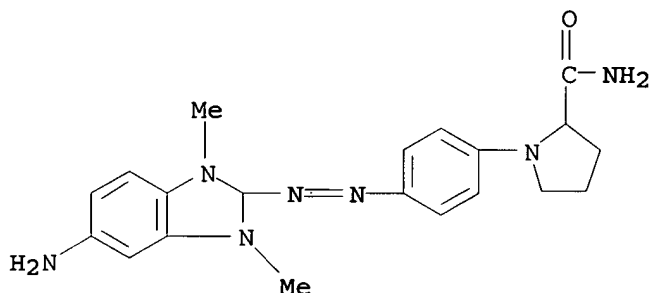
RN 704885-88-1 HCAPLUS  
CN 1H-Benzimidazolium, 5-amino-2-[[4-(2-carboxy-3-hydroxy-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-89-2 HCAPLUS

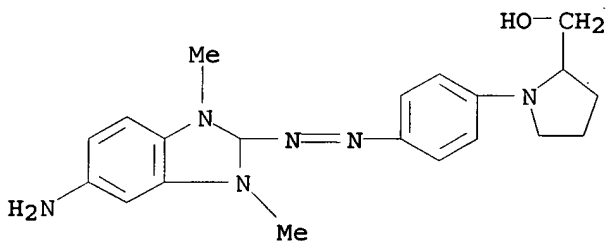
CN 1H-Benzimidazolium, 5-amino-2-[[4-[2-(aminocarbonyl)-1-pyrrolidinyl]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-90-5 HCAPLUS

CN 1H-Benzimidazolium, 5-amino-2-[[4-[2-(hydroxymethyl)-1-pyrrolidinyl]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)

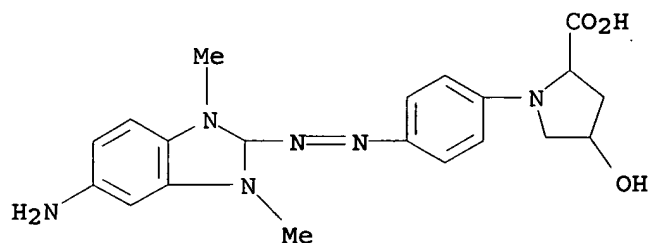


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-91-6 HCAPLUS

CN 1H-Benzimidazolium, 5-amino-2-[[4-(2-carboxy-4-hydroxy-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)

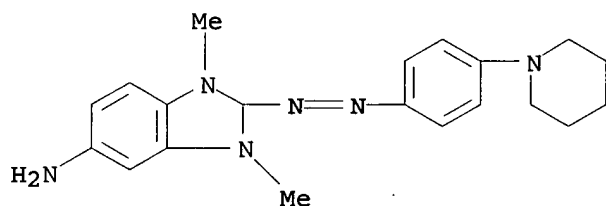




ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-92-7 HCAPLUS

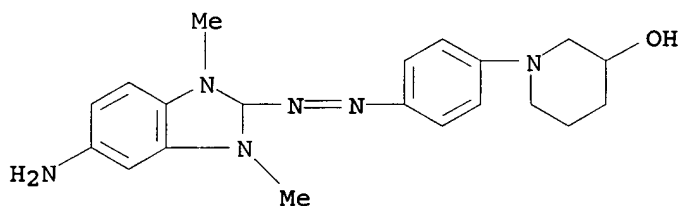
CN 1H-Benzimidazolium, 5-amino-1,3-dimethyl-2-[[4-(1-piperidiny]phenyl]azo]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-93-8 HCAPLUS

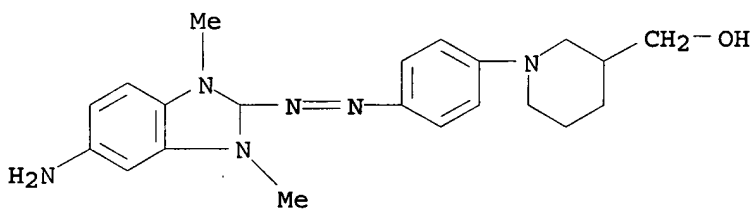
CN 1H-Benzimidazolium, 5-amino-2-[[4-(3-hydroxy-1-piperidiny]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-94-9 HCAPLUS

CN 1H-Benzimidazolium, 5-amino-2-[[4-[3-(hydroxymethyl)-1-piperidiny]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)

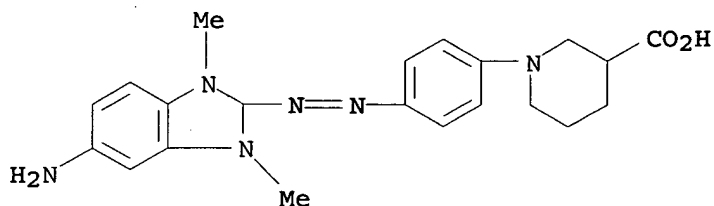


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-95-0 HCAPLUS

CN 1H-Benzimidazolium, 5-amino-2-[[4-(3-carboxy-1-

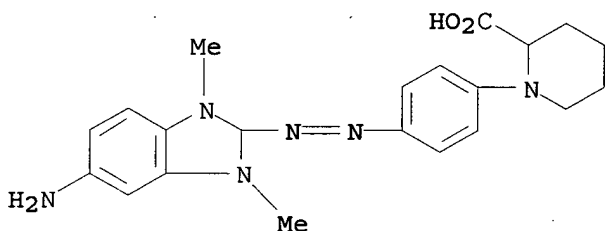
piperidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-96-1 HCAPLUS

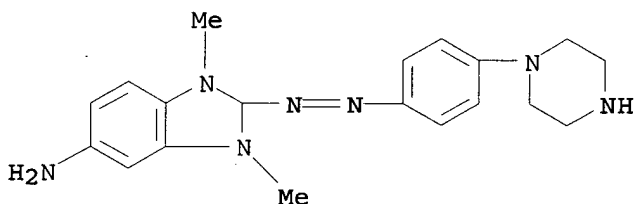
CN 1H-Benzimidazolium, 5-amino-2-[[4-(2-carboxy-1-piperidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-97-2 HCAPLUS

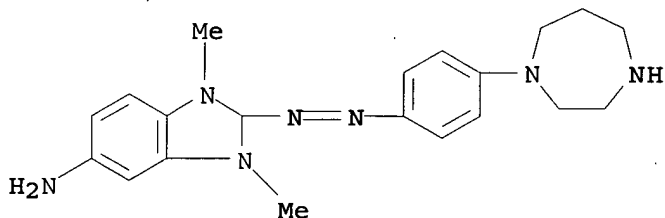
CN 1H-Benzimidazolium, 5-amino-1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-98-3 HCAPLUS

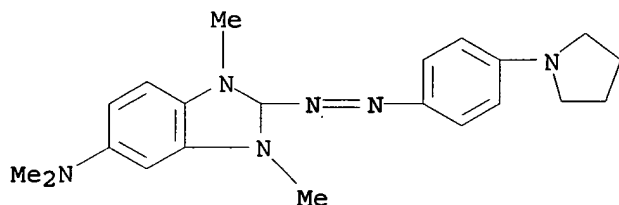
CN 1H-Benzimidazolium, 5-amino-2-[[4-(hexahydro-1H-1,4-diazepin-1-yl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704885-99-4 HCAPLUS

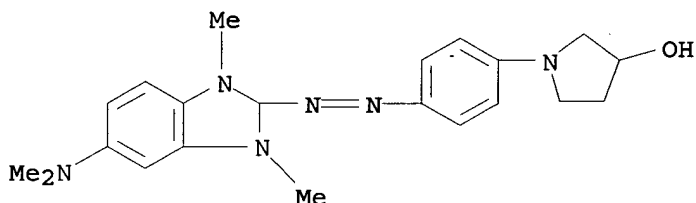
CN 1H-Benzimidazolium, 5-(dimethylamino)-1,3-dimethyl-2-[[4-(1-pyrrolidinyl)phenyl]azo]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-00-0 HCAPLUS

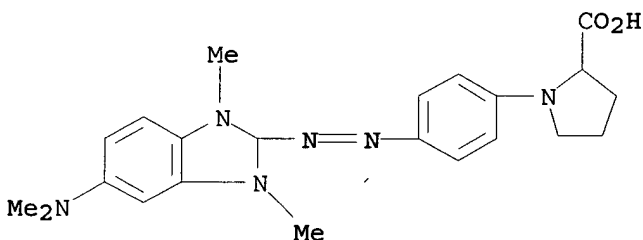
CN 1H-Benzimidazolium, 5-(dimethylamino)-2-[[4-(3-hydroxy-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-01-1 HCAPLUS

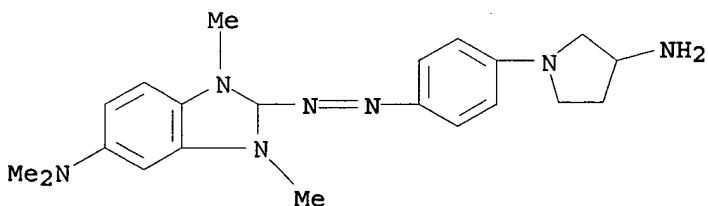
CN 1H-Benzimidazolium, 2-[[4-(2-carboxy-1-pyrrolidinyl)phenyl]azo]-5-(dimethylamino)-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-02-2 HCAPLUS

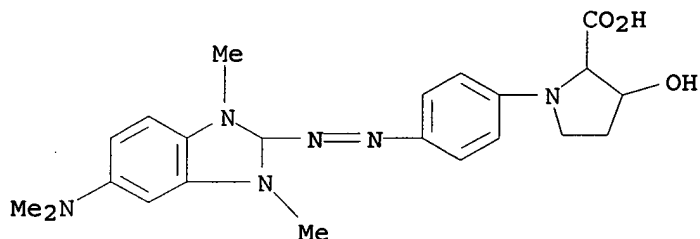
CN 1H-Benzimidazolium, 2-[[4-(3-amino-1-pyrrolidinyl)phenyl]azo]-5-(dimethylamino)-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-03-3 HCAPLUS

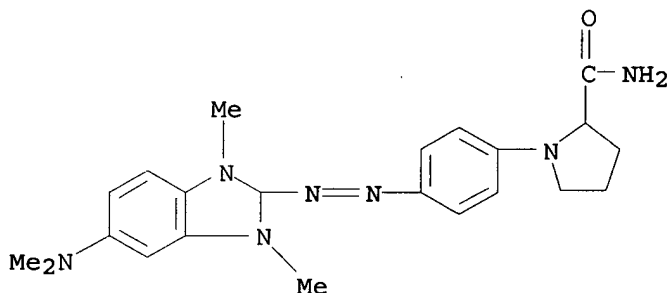
CN 1H-Benzimidazolium, 2-[[4-(2-carboxy-3-hydroxy-1-pyrrolidinyl)phenyl]azo]-5-(dimethylamino)-1,3-dimethyl- (9CI)  
(CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-04-4 HCAPLUS

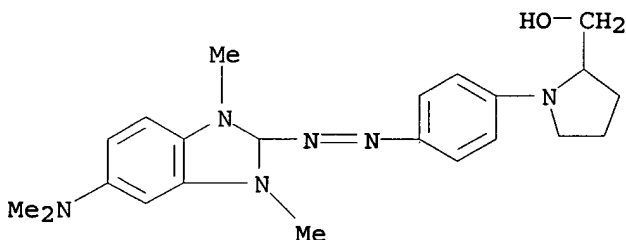
CN 1H-Benzimidazolium, 2-[[4-[2-(aminocarbonyl)-1-pyrrolidinyl]phenyl]azo]-5-(dimethylamino)-1,3-dimethyl- (9CI)  
(CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-05-5 HCAPLUS

CN 1H-Benzimidazolium, 5-(dimethylamino)-2-[[4-[2-(hydroxymethyl)-1-pyrrolidinyl]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)

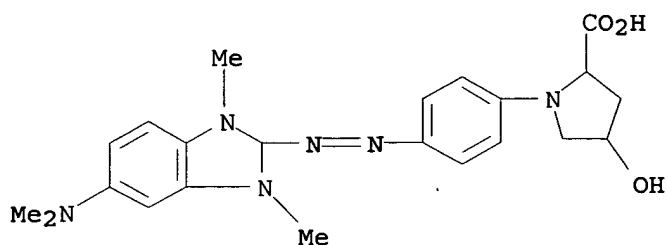


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-06-6 HCAPLUS

CN 1H-Benzimidazolium, 2-[[4-(2-carboxy-4-hydroxy-1-pyrrolidinyl)phenyl]azo]-5-(dimethylamino)-1,3-dimethyl- (9CI)

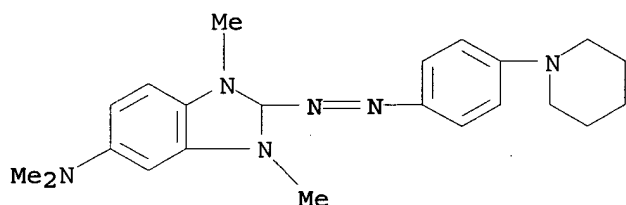
(CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-07-7 HCAPLUS

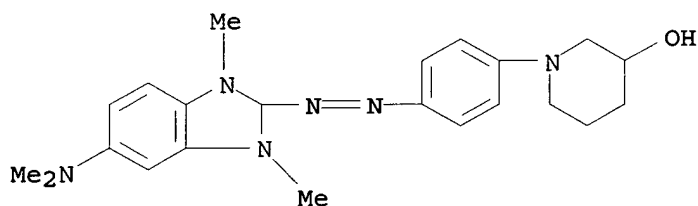
CN 1H-Benzimidazolium, 5-(dimethylamino)-1,3-dimethyl-2-[[4-(1-piperidiny]phenyl]azo]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-08-8 HCAPLUS

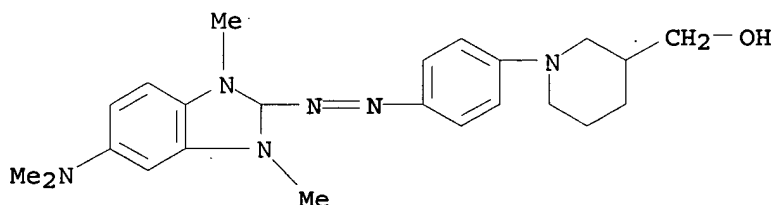
CN 1H-Benzimidazolium, 5-(dimethylamino)-2-[[4-(3-hydroxy-1-piperidiny]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-09-9 HCAPLUS

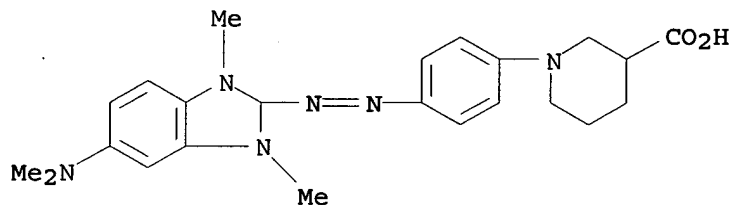
CN 1H-Benzimidazolium, 5-(dimethylamino)-2-[[4-[3-(hydroxymethyl)-1-piperidiny]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-10-2 HCAPLUS

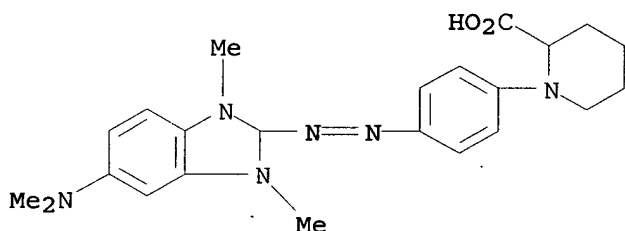
CN 1H-Benzimidazolium, 2-[[4-(3-carboxy-1-piperidiny)phenyl]azo]-5-(dimethylamino)-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-11-3 HCAPLUS

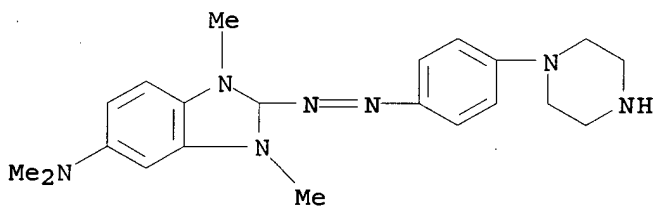
CN 1H-Benzimidazolium, 2-[[4-(2-carboxy-1-piperidiny)phenyl]azo]-5-(dimethylamino)-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-12-4 HCAPLUS

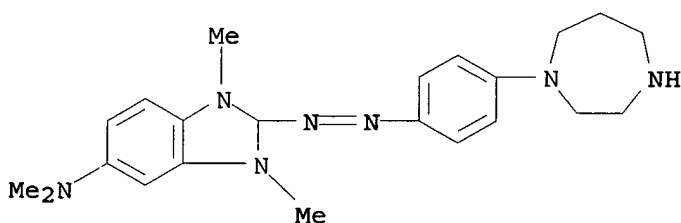
CN 1H-Benzimidazolium, 5-(dimethylamino)-1,3-dimethyl-2-[[4-(1-piperaziny)phenyl]azo]- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 704886-13-5 HCAPLUS

CN 1H-Benzimidazolium, 5-(dimethylamino)-2-[[4-(hexahydro-1H-1,4-diazepin-1-yl)phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



## ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 56-81-5, Glycerol, biological studies 57-55-6, Propylene glycol, biological studies 64-17-5, Ethanol, biological studies 90-15-3,  $\alpha$ -Naphthol 95-55-6D, o-Aminophenol, derivs. 95-88-5, 4-ChloroResorcinol 106-50-3D, p-Phenylenediamine, derivs. 108-45-2, 1,3-Diaminobenzene, biological studies 108-45-2D, m-Phenylenediamine, derivs. 108-46-3, Resorcinol, biological studies 108-46-3D, Resorcinol, derivs. 123-30-8D, p-Aminophenol, derivs. 124-43-6 533-31-3, Sesamol 591-27-5D, m-Aminophenol, derivs. 608-25-3, 2-MethylResorcinol 2380-86-1, 6-Hydroxyindole 2380-94-1, 4-Hydroxyindole 7469-77-4, 2-Methyl-1-Naphthol 7556-37-8, 4-Hydroxy-N-methylindole 7722-84-1, Hydrogen peroxide, biological studies 9035-73-8, Oxidase 12221-52-2, Basic Red 22 12270-25-6, Basic Red 51 16867-03-1, 2-Amino-3-hydroxypyridine 25711-72-2, 3-Ureido aniline 26021-57-8, 6-Hydroxybenzomorpholine 26455-21-0 61901-61-9, Basic Orange 31 70643-19-5 81329-90-0 81892-72-0 85679-78-3, 3,5-DiAmino-2,6-dimethoxypyridine 116844-55-4, Basic Yellow 87 149330-25-6 178822-20-3 188006-49-7 402941-00-8 435275-61-9 435275-62-0 435275-65-3 435275-66-4 435275-67-5 435275-68-6 435275-69-7 435275-70-0 435275-72-2 435275-73-3 435275-74-4 435275-82-4 477952-17-3 477952-18-4 477952-19-5 477952-20-8 477952-21-9 478239-95-1 478239-96-2 478239-97-3 478239-98-4 478239-99-5 478240-00-5 478240-01-6 478240-02-7 478240-03-8 478240-04-9 478240-05-0 478240-06-1 478240-07-2 478240-08-3 478240-09-4 478240-10-7 478240-11-8 478240-48-1 478242-96-5 503091-83-6 607355-12-4 607355-13-5 607355-16-8 607355-17-9 607355-18-0 607355-19-1 607355-20-4 607355-21-5 701975-01-1 701975-04-4 701975-07-7 701975-08-8 701975-09-9 701975-10-2 701975-11-3 701975-12-4 701975-13-5 701975-14-6 701975-15-7 701975-16-8 701975-17-9 701975-18-0 701975-19-1 701975-20-4 701975-21-5 701975-22-6 701975-23-7 701975-24-8 701975-25-9 701975-26-0 701975-27-1 701975-28-2 701975-29-3 701975-30-6 701975-31-7 701975-32-8 701975-33-9 701975-34-0 701975-35-1 704885-69-8 704885-70-1 704885-71-2 704885-72-3 704885-73-4 704885-74-5 704885-75-6 704885-76-7 704885-77-8 704885-78-9 704885-79-0 704885-80-3 704885-81-4 704885-82-5 704885-83-6 704885-84-7 704885-85-8 704885-86-9 704885-87-0 704885-88-1 704885-89-2 704885-90-5 704885-91-6 704885-92-7 704885-93-8 704885-94-9 704885-95-0 704885-96-1 704885-97-2 704885-98-3 704885-99-4 704886-00-0 704886-01-1 704886-02-2 704886-03-3 704886-04-4 704886-05-5 704886-06-6 704886-07-7 704886-08-8 704886-09-9 704886-10-2 704886-11-3 704886-12-4 704886-13-5

(hair dyeing compns. comprising

cationic tertiary phenylenediamine with pyrrolidine ring and  
cationic heterocyclic direct dye)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L26 ANSWER 6 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:250648 HCAPLUS

DOCUMENT NUMBER: 140:275728

TITLE: Temporary hair dye compositions containing  
anionic polymers

INVENTOR(S): Massoni, Jack

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 5 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004055094	A1	20040325	US 2002-244275	2002 0916
CA 2499059	AA	20040325	CA 2003-2499059	2003 0818
WO 2004024829	A1	20040325	WO 2003-US25672	2003 0818
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1546262	A1	20050629	EP 2003-795612	2003 0818
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003014371	A	20050719	BR 2003-14371	2003 0818

PRIORITY APPLN. INFO.:

US 2002-244275

A

2002



0916

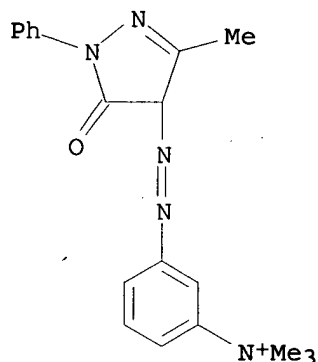
<--  
WO 2003-US25672 W2003  
0818

AB A temporary hair dyeing composition which comprises: a cationic dye, a water-soluble anionic polymer, an alkaline agent., and water. Thus, a formulation contained water 92.680, Ultrez 10 1.000, methyl- and propylparaben 0.500, fragrance 0.200, Steareth 21 0.050, ethoxydiglycol 5.000, Basic Brown 17 0.050, Basic Red 57 0.010, Basic Yellow 57 0.010, and ethanolamine 0.500%.

IT 68391-31-1, Basic Yellow 57  
(temporary hair dye compns.  
containing anionic polymers)

RN 68391-31-1 HCAPLUS

CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

IC ICM A61K007-13

INCL 008405000

CC 62-3 (Essential Oils and Cosmetics)

IT 79-10-7D, Acrylic acid, esters, polymers 7748-27-8D, Vinyl isodecanoate, polymers with vinyl compds. 9002-92-0, Laureth 9005-00-9, Steareth 9005-38-3, Sodium alginate 9005-64-5, Polysorbate 20 12270-25-6, Basic Red 51 25014-41-9D, Polyacrylonitrile, hydrolyzed, compds. with triethanolamine 26381-41-9, Basic Brown 16 50856-24-1D, polymers with vinyl compds. 50858-60-1D, polymers with vinyl compds. 52352-43-9D, Polyethylene glycol stearyl ether methacrylate, polymers with vinyl compds. 61901-61-9, Basic Orange 31 65930-07-6, Acrylonitrile-starch copolymer sodium salt 68025-34-3, Acrylonitrile-starch copolymer potassium salt 68123-13-7, Basic Blue 99 68391-30-0, Basic Red 76 68391-31-1, Basic Yellow 57 75819-41-9D, polymers with vinyl compds. 102516-09-6D, polymers with vinyl compds. 116464-11-0D, polymers with vinyl compds. 116844-55-4, Basic Yellow 87 176742-32-8, Basic Brown 17 195739-91-4, Ultrez 10 250241-42-0D, polymers with vinyl compds. 674304-22-4, Sodium acrylate-vinyl

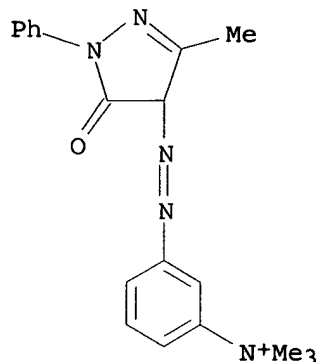
isodecanoate copolymer 674305-80-7, Basic Red 57  
(temporary hair dye compns.  
containing anionic polymers)

L26 ANSWER 7 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:249596 HCAPLUS  
DOCUMENT NUMBER: 140:275725  
TITLE: Hair dyes containing dibasic acid diesters  
INVENTOR(S): Sugimoto, Kenichi  
PATENT ASSIGNEE(S): Kanebo, Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004091427	A2	20040325	JP 2002-257362	2002 0903

PRIORITY APPLN. INFO.: <-- JP 2002-257362  
2002  
0903

OTHER SOURCE(S): MARPAT 140:275725  
AB Hair dyes contain direct dyes and R1O2C(CH2)nCO2R2 (R1, R2 = C1-8  
linear or branched alkyl, alkenyl, aryl; n = 0-18). A composition  
containing Basic Red 76 0.05, di-Et sebacate 5.0,  
behenyltrimethylammonium chloride 3.0, stearyl alc. 6.0, liquid  
paraffin 1.0, vaseline 2.0, dimethylpolysiloxane 2.0,  
methylparaben 0.2, citric acid 0.02, Na citrate 0.08, perfume 0.3,  
and H2O to 100 weight% showed good hair-dyeing and -conditioning  
effects and did not stain the skin.  
IT 68391-31-1, Basic Yellow 57  
(hair-dyeing and -conditioning  
compns. containing direct dyes and dibasic acid diesters)  
RN 68391-31-1 HCAPLUS  
CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-  
4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

IC ICM A61K007-13  
 CC 62-3 (Essential Oils and **Cosmetics**)  
 IT 110-40-7, Diethyl sebacate 624-17-9, Azelaic acid diethyl ester  
 1724-48-7, Dipropyl glutarate 2871-01-4, HC Red 3 26381-41-9,  
 Basic Brown 16 68123-13-7, Basic Blue 99 68391-30-0, Basic Red  
 76 68391-31-1, Basic Yellow 57 83803-99-0, HC Brown  
 Number 2 176742-32-8, Basic Brown 17  
 (hair-dyeing and -conditioning  
 compns. containing direct dyes and dibasic acid diesters)

L26 ANSWER 8 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:76448 HCAPLUS

DOCUMENT NUMBER: 140:151570

TITLE: Hair dye compositions containing  
 alkyl-modified carboxyvinyl polymer

INVENTOR(S): Yamashita, Takahiro; Shibata, Kazuya; Ochiai,  
 Masatoshi; Kobe, Tetsuya

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004026690	A2	20040129	JP 2002-183127	2002 0624

PRIORITY APPLN. INFO.:

<-- JP 2002-183127

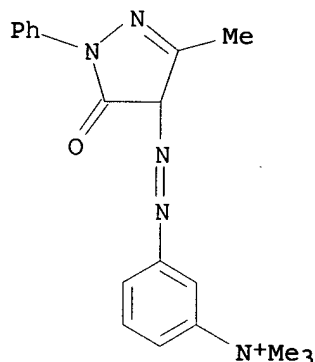
2002  
0624

<--

AB The invention relates to a hair dye composition providing excellent  
 dyeing effect and improved hair touch feeling without causing skin  
 stain, wherein the hair dye composition is characterized by containing

basic, nonionic, and/or neutral dye component and alkyl-modified carboxyvinyl polymer. A hair dye composition containing HC Blue 2 0.1, Steel Blue 0.1, HC Yellow 4 0.1, ethanol 16, propylene glycol 5, Pemulen TR-1 1, carboxyvinyl polymer 0.4, trimethylsilyl-terminated dimethylpolysiloxane 13, citric acid 0.5, isoparaffin 2, liquid paraffin 2, hydroxyethyl cellulose 2, and water balance to 100 % was formulated.

IT 68391-31-1, Basic Yellow 57  
 (hair dye compns. containing dyes,  
 and alkyl-modified carboxyvinyl polymers)  
 RN 68391-31-1 HCAPLUS  
 CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

IC ICM A61K007-13  
 ICS D06P001-52; D06P001-613; D06P003-04  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 2784-89-6, HC Red 1 6358-09-4, 2-Amino-6-chloro-4-nitrophenol  
 20721-50-0, Disperse Black 9 26381-41-9, Basic Brown 16  
 33229-34-4, HC Blue 2 59820-43-8, HC Yellow 4 68391-31-1  
 , Basic Yellow 57 81612-54-6, HC Orange Number 3 96827-24-6,  
 Carbopol 1342 138789-85-2, Pemulen TR-1 145687-02-1, Pemulen  
 TR-2  
 (hair dye compns. containing dyes,  
 and alkyl-modified carboxyvinyl polymers)

L26 ANSWER 9 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2003:909144 HCAPLUS  
 DOCUMENT NUMBER: 139:385859  
 TITLE: Hair dyeing compositions containing a cationic  
 direct dye and a sunscreen  
 INVENTOR(S): Grit, Mustafa  
 PATENT ASSIGNEE(S): KPSS-KAO Professional Salon Services G.m.b.H.,  
 Germany  
 SOURCE: Eur. Pat. Appl., 13 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1362580	A1	20031119	EP 2003-12471	2001 0622
EP 1362580	B1	20050302		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI, MK, CY, AL, TR				
DE 10031014	A1	20020110	DE 2000-10031014	2000 0623
EP 1166752	A2	20020102	EP 2001-114735	2001 0622
EP 1166752	A3	20030122		
EP 1166752	B1	20040407		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			DE 2000-10031014	A 2000 0623
			EP 2001-114735	A3 2001 0622
OTHER SOURCE(S):			MARPAT 139:385859	
GI				

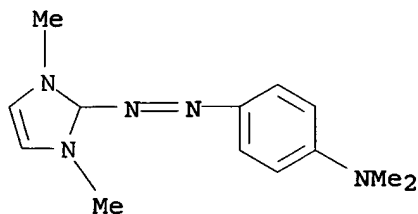
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT  
\*

AB The invention concerns hair dye compns. that contain imidazole-azo derivs. as cationic direct dyes and anionic sunscreens. Cationic dyes of the general formula (I), (II), and (III) where R1 ,R2 ,R3 and R4 are H, CH3 or C2H5 and R5 is H, OMe or OEt and Y is an anion, are used in the dyeing shampoos, conditioners, hair tonics. Thus a composition contained (weight/weight%): sodium C12-C14 alkylether sulfate (2-3 EO) 10.00; cocoamidoprpylbetaine 2.00; PEG-3-distearate 2.00; Benzophenone-3 0.50; 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]imidazolium chloride 0.10; Basic Red 2 0.05; citric acid as preservative q.s.; water to 100.

IT 77061-58-6 623171-40-4 623171-41-5  
(hair dyeing compns. containing a cationic direct dye and a sunscreen)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

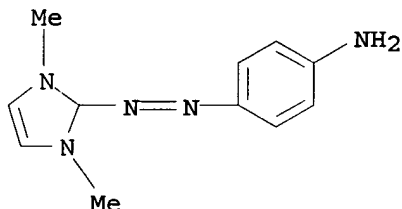


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 623171-40-4 HCAPLUS

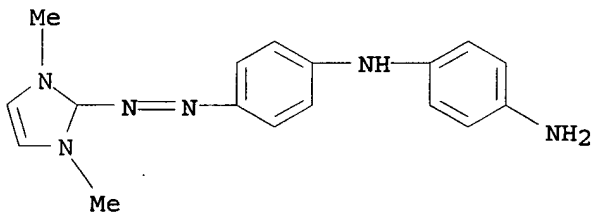
CN Benzenamine, 4-[(2,3-dihydro-1,3-dimethyl-1H-imidazol-2-yl)azo]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 623171-41-5 HCAPLUS

CN 1,4-Benzenediamine, N-[4-[(2,3-dihydro-1,3-dimethyl-1H-imidazol-2-yl)azo]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 131-57-7, Benzophenone-3 77061-58-6 623171-40-4 623171-41-5

(hair dyeing compns. containing a cationic direct dye and a sunscreen)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L26 ANSWER 10 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2003:815250 HCAPLUS  
DOCUMENT NUMBER: 139:311937  
TITLE: Hair dye compositions containing carboxylic  
acid  
INVENTOR(S): Quinn, Francis Xavier; Giustiniani, Pascal  
PATENT ASSIGNEE(S): L'Oreal, Fr.  
SOURCE: Eur. Pat. Appl., 38 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1352633	A1	20031015	EP 2003-290750	2003 0325

<--  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,  
EE, HU, SK

FR 2838338	A1	20031017	FR 2002-4529	2002 0411
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FR 2838338	B1	20040528		
JP 2003300847	A2	20031021	JP 2003-107063	2003 0410

BR 2003001299	A	20040817	BR 2003-1299	2003 0410
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US 2003233713	A1	20031225	US 2003-411328	2003 0411
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PRIORITY APPLN. INFO.:		FR 2002-4529	A	2002 0411
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		US 2002-375428P	P	2002 0426
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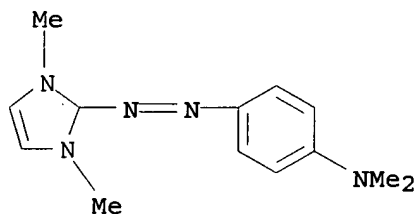
AB Hair dye compns. contain carboxylic acids complexed with a direct dye, and an alkaline agent. The compns. are extremely useful for oxidative dye compns. Water is added to form the complex, and the complex was dried. To the dry material was added H2O2, and the dye powder was stable in the solution of H2O2. The above suspension was added to p-toluenediamine 0.2, resorcinol 0.1, p-aminophenol 0.5, 2-methyl-5- $\beta$ -hydroxyethylaminophenol 0.35,

2-methyl-5-aminophenol 0.3, oleic acid 2.7, momoethanolamine 0.6, cetylstearyl alc. 16, ethoxylated oleic cetyl alc. 3.5, sequestrant 0.8, 20.5% NH<sub>3</sub> 0.8, ammonium thiolactate 4.8, perfume qs and water qs to 100 g.

IT 77061-58-6D, complexes with carboxylic acids  
 97404-02-9D, complexes with carboxylic acids  
 178822-03-2D, complexes with carboxylic acids  
 (hair dye compns. containing carboxylic acid)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

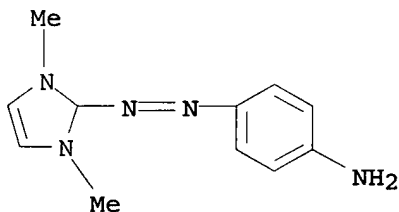


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



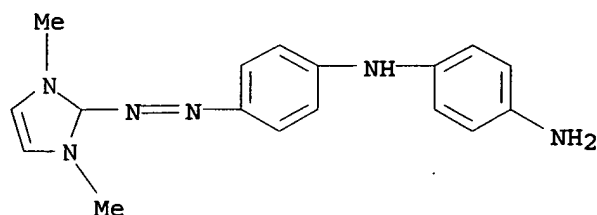
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-03-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)





● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 65-85-0D, Benzoic acid, complexes with direct dyes 81-25-4D, Cholic acid, complexes with direct dyes 83-44-3D, DeoxyCholic acid, complexes with direct dyes 95-55-6D, o-Aminophenol, derivs. 95-70-5, p-Toluenediamine 106-50-3D, p-Phenylenediamine, derivs. 108-45-2D, m-Phenylenediamine, derivs. 123-30-8D, p-Aminophenol, derivs. 474-25-9D, Chenodeoxycholic acid, complexes with direct dyes 591-27-5D, m-Aminophenol, derivs. 621-82-9D, Cinnamic acid, complexes with direct dyes 2835-95-2, 2-Methyl-5-aminophenol 25620-59-1D, Aminoanthraquinone, cationic derivs. 30569-52-9D, complexes with carboxylic acids 46921-92-0D, complexes with carboxylic acids 55302-96-0 77061-58-6D, complexes with carboxylic acids 97404-02-9D, complexes with carboxylic acids 178822-03-2D, complexes with carboxylic acids 375348-42-8D, complexes with carboxylic acids 612092-47-4D, complexes with carboxylic acids 612092-48-5D, complexes with carboxylic acids

(hair dye compns. containing carboxylic acid)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 11 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:795940 HCAPLUS

DOCUMENT NUMBER: 139:296522

TITLE: Hair dye compositions containing 2,3-dihydro-2-[3-(3H-indol-2-yl)-2-propenylidene]-1H-indoles

INVENTOR(S): Matsunaga, Kenichi

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: U.S. Pat. Appl. Publ., 9 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2003188390	A1	20031009	US 2002-319589	

2002  
1216

&lt;--

US 6878169 B2 20050412  
EP 1352631 A1 20031015 EP 2002-7368

2002  
0408

&lt;--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
PRIORITY APPLN. INFO.: EP 2002-7368 A

2002  
0408

&lt;--

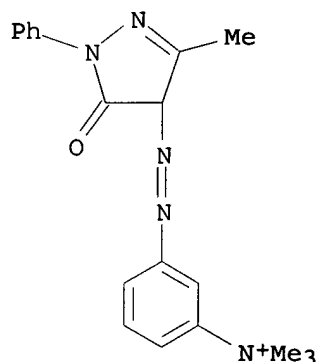
OTHER SOURCE(S): MARPAT 139:296522

AB A hair dye composition contains 2,3-dihydro-2-[3-(3H-indol-2-yl)-2-propenylidene]-1H-indoles or their salts. This hair dye composition undergoes a small change in color tone even after storage because it contains the direct dye which has high stability against any 1 of an alkaline agent, oxidizing agent and reducing agent, and at the same time, has markedly high hair dyeing power and exhibits excellent light resistance, washing resistance, perspiration resistance, friction resistance and heat resistance. Thus, a formulation contained in the 1st part the dye 0.1, 25% aqueous NH<sub>3</sub> 6.0, NH<sub>4</sub>Cl 2.7, EtOH 10.0, propylene glycol 10.0, and water qs to 100%; in the second part.

IT 68391-31-1, Basic Yellow 57  
(hair dye compns. containing  
(dihydroindolylpropenylidene)indoles)

RN 68391-31-1 HCAPLUS

CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

IC ICM A61K007-13

INCL 008405000; 008406000; 008408000

CC 62-3 (Essential Oils and Cosmetics)

IT 50-81-7, Ascorbic acid, biological studies 477-73-6, Basic Red 2  
5421-46-5, Ammonium thioglycolate 7757-83-7, Sodium sulfite  
68391-31-1, Basic Yellow 57 609337-35-1

(hair dye compns. containing  
(dihydroindolylpropenylidene)indoles)

L26 ANSWER 12 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2003:710771 HCAPLUS  
 DOCUMENT NUMBER: 139:218944  
 TITLE: Hair dye pretreatment compositions containing  
 basic dyes  
 INVENTOR(S): Hayashi, Hiroyuki  
 PATENT ASSIGNEE(S): Hoyu Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2003252729	A2	20030910	JP 2002-56939	2002 0304

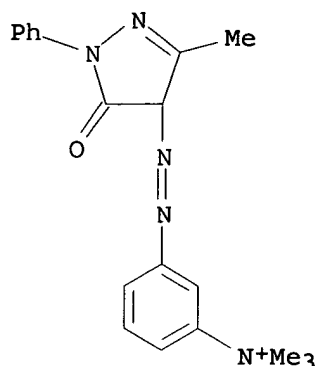
PRIORITY APPLN. INFO.: <-- JP 2002-56939  
 2002  
 0304

AB The invention relates to a composition for treatment of hair prior to  
 applying hair dye agent, especially an oxidative hair dye agent, for  
 uniform and robust dyeing, wherein the composition is characterized by  
 containing basic dye, e.g. basic blue 99, basic brown 16, basic brown  
 17, basic red 76, and/or basic yellow 57. A composition containing basic  
 brown 17 0.3, lauryl trimethylammonium chloride 0.7 cetanol 2.5,  
 dipropylene glycol 3, Me paraben 0.2, monoethanolamine q.s. to pH  
 9, fragrance 0.1, and water balance to 100 % was formulated.

IT 68391-31-1, Basic yellow 57  
 (hair dye pretreatment compns.  
 containing basic dyes)

RN 68391-31-1 HCAPLUS

CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-  
 4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

IC ICM A61K007-06  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 26381-41-9, Basic brown 16 68123-13-7, Basic blue 99  
 68391-30-0, Basic red 76 68391-31-1, Basic yellow 57  
 176742-32-8, Basic brown 17  
 (hair dye pretreatment compns.  
 containing basic dyes)

L26 ANSWER 13 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:793375 HCAPLUS  
 DOCUMENT NUMBER: 137:299536  
 TITLE: Novel dyeing composition for dyeing keratinous  
 fibers comprising a particular dicationic  
 monoazo dye  
 INVENTOR(S): Vidal, Laurent; David, Herve  
 PATENT ASSIGNEE(S): L'oreal, Fr.  
 SOURCE: PCT Int. Appl., 72 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002080869	A2	20021017	WO 2002-FR1153	2002 0403

WO 2002080869 A3 20040219  
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,  
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,  
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
 MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE,  
 SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
 VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 FR 2822698 A1 20021004 FR 2001-4537

2001  
 0403

EP 1408919 A2 20040421 EP 2002-759813

2002  
 0403

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 JP 2005504726 T2 20050217 JP 2002-578908

2002  
 0403

US 2004093676 A1 20040520 US 2003-473810

2003  
 1211

PRIORITY APPLN. INFO.:

FR 2001-4537 A

2001  
 0403

WO 2002-FR1153 W

2002  
 0403

OTHER SOURCE(S): MARPAT 137:299536

AB The invention concerns a novel dyeing composition for dyeing keratinous fibers, in particular human hair, comprising a dicationic monoazo dye, and the dyeing method using said composition. A dicationic monoazo dye was prepared and formulation of a hair dye containing  $5 \times 10^{-4}$  mole of this dye was disclosed.

IT 468096-61-9P 468096-63-1P  
 (novel dyeing composition for dyeing  
 keratinous fibers comprising particular dicationic  
 monoazo dye)

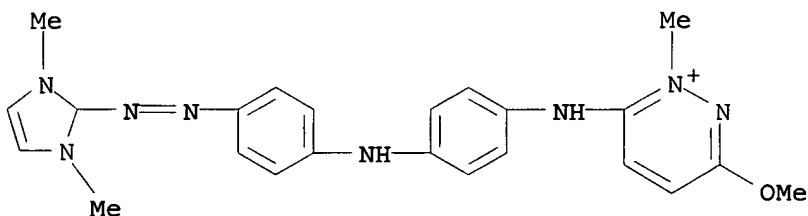
RN 468096-61-9 HCAPLUS

CN Pyridazinium, 6-[[4-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]phenyl]amino]phenyl]amino]-3-methoxy-1-methyl-, diformate  
 (9CI) (CA INDEX NAME)

CM 1

CRN 468096-60-8

CMF C23 H26 N8 O



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 71-47-6

CMF C H O2

O=CH-O-

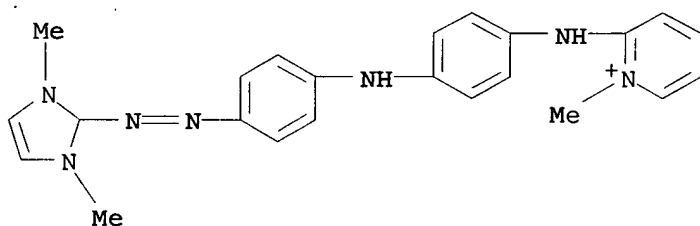
RN 468096-63-1 HCAPLUS

CN Pyridinium, 2-[[4-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]phenyl]amino]phenyl]amino]-1-methyl-, diformate (9CI) (CA INDEX NAME)

CM 1

CRN 468096-62-0

CMF C23 H25 N7



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 71-47-6

CMF C H O2

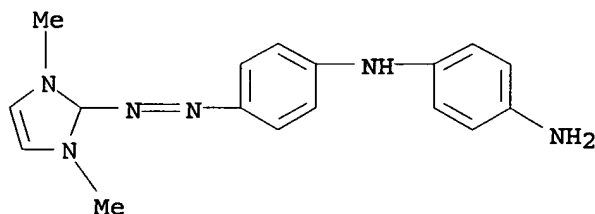
O=CH-O-

IT 468096-59-5

(novel dyeing composition for dyeing  
keratinous fibers comprising particular dicationic  
monoazo dye)

RN 468096-59-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

ICS C09B044-16; C09B044-20

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 27

IT 468096-61-9P 468096-63-1P

(novel dyeing composition for dyeing  
keratinous fibers comprising particular dicationic  
monoazo dye)

IT 14338-32-0 461382-92-3 468096-59-5

(novel dyeing composition for dyeing  
keratinous fibers comprising particular dicationic  
monoazo dye)

L26 ANSWER 14 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STM

ACCESSION NUMBER: 2002:777682 HCAPLUS

DOCUMENT NUMBER: 137:283946

TITLE: Dyeing composition for dyeing keratinous  
fibers comprising a cationic azo-dye

INVENTOR(S): Vidal, Laurent; Fadli, Aziz

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002078660	A1	20021010	WO 2002-FR1139	2002 0402

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,  
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE,  
SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT,  
BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,  
NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG

FR 2822697 A1 20021004 FR 2001-4470

2001  
0402

FR 2822697  
EP 1377265

B1 20030725  
A1 20040107

<--  
EP 2002-757751

2002  
0402

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
JP 2004529138 T2 20040924 JP 2002-576927

2002  
0402

US 2004093675

A1 20040520

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US 2003-473630

2003  
1209

US 6884267  
PRIORITY APPLN. INFO.:

B2 20050426

<--  
FR 2001-4470

A  
2001  
0402

<--  
WO 2002-FR1139

W  
2002  
0402

AB The invention concerns a novel dyeing composition for dyeing keratinous fibers, in particular human hair, comprising a cationic azo dye (Markush structures given). Thus, 2-[4-(3-amino-pyrazole-1-yl)phenylazo]-1,3-dimethyl-3H-imidazol-1-ium perchlorate (I) was prepared by the reaction of 2-(4-methoxyphenylazo)-1,3-dimethyl-3H-imidazol-1-ium perchlorate and 3-aminopyrazole. I produces a red color.

IT 467213-59-8P

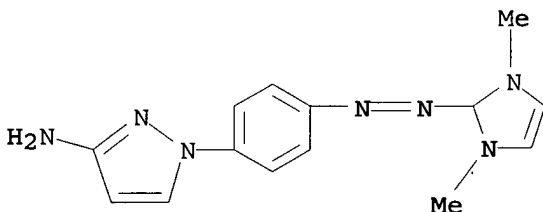
(dyeing composition for dyeing  
keratinous fibers comprising cationic azo-dye)

RN 467213-59-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(3-amino-1H-pyrazol-1-yl)phenyl]azo]-1,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 467213-58-7  
CMF C14 H16 N7



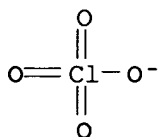
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 14797-73-0



CMF Cl O4



IT 467213-60-1

(dyeing composition for dyeing  
keratinous fibers comprising cationic azo-dye)

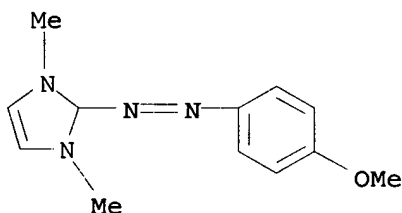
RN 467213-60-1 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-,  
perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 75687-85-3

CMF Cl2 H15 N4 O

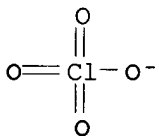


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 14797-73-0

CMF Cl O4



IC ICM A61K007-13

ICS C09B044-16

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 28

IT 467213-59-8P

(dyeing composition for dyeing  
keratinous fibers comprising cationic azo-dye)

IT 1820-80-0, 3-Aminopyrazole. 467213-60-1

(dyeing composition for dyeing  
keratinous fibers comprising cationic azo-dye)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE

## IN THE RE FORMAT

L26 ANSWER 15 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:777681 HCAPLUS  
 DOCUMENT NUMBER: 137:283945  
 TITLE: Dyeing composition for dyeing keratinous  
 fibers comprising a cationic azo-dye  
 INVENTOR(S): Vidal, Laurent; Fadli, Aziz  
 PATENT ASSIGNEE(S): L'oreal, Fr.  
 SOURCE: PCT Int. Appl., 31 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002078659	A1	20021010	WO 2002-FR1138	2002 0402

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,  
 CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,  
 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
 MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE,  
 SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
 VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT,  
 BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,  
 NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
 ML, MR, NE, SN, TD, TG

FR 2822693	A1	20021004	FR 2001-4466	2001 0402
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FR 2822693	B1	20030627		
EP 1377264	A1	20040107	EP 2002-724400	2002 0402

JP 2004529137	T2	20040924	JP 2002-576926	2002 0402
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US 2004107513	A1	20040610	US 2003-473625	2003 1211
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PRIORITY APPLN. INFO.:		FR 2001-4466	A	2001 0402
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		WO 2002-FR1138	W	2002 0402
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OTHER SOURCE(S): MARPAT 137:283945

AB The invention concerns a novel dyeing composition for dyeing keratinous fibers, in particular human hair, comprising a cationic azo dye (Markush structures given). Thus, 2-[4-(3-hydroxyprrolidine-1-yl)phenylazo]-1,3-dimethyl-3H-imidazol-1-ium perchlorate (I) was prepared by the reaction of 2-(4-methoxy-phenylazo)-1,3-dimethyl-3H-imidazol-1-ium perchlorate and pyrrolidine. I produces a red color.

IT 467224-56-2P 467224-58-4P 467224-60-8P

(dyeing composition for dyeing

keratinous fibers comprising cationic azo-dye)

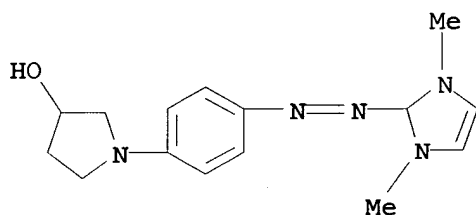
RN 467224-56-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(3-hydroxy-1-pyrrolidinyl)phenyl]azo]-1,3-dimethyl-, perchlorate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 467224-55-1

CMF C15 H20 N5 O

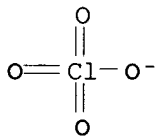


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 14797-73-0

CMF Cl O4



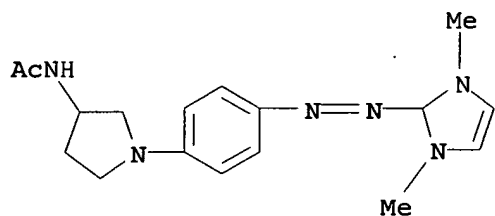
RN 467224-58-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[3-(acetylamino)-1-pyrrolidinyl]phenyl]azo]-1,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 467224-57-3

CMF C17 H23 N6 O

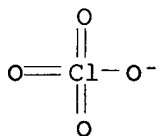


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 14797-73-0

CMF Cl O4



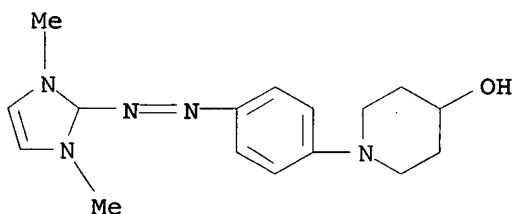
RN 467224-60-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(4-hydroxy-1-piperidiny)phenyl]azo]-1,3-dimethyl-, perchlorate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 467224-59-5

CMF C16 H22 N5 O

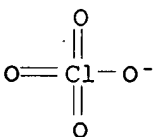


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

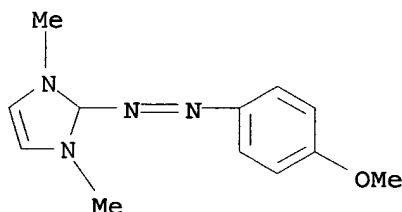
CM 2

CRN 14797-73-0

CMF Cl O4

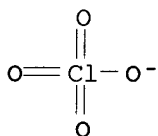


IT 467213-60-1  
 (dyeing composition for dyeing  
 keratinous fibers comprising cationic azo-dye)  
 RN 467213-60-1 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-,  
 perchlorate (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 75687-85-3  
 CMF C12 H15 N4 O



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2  
 CRN 14797-73-0  
 CMF Cl O4



IC ICM A61K007-13  
 ICS C09B044-16  
 CC 62-3 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 28  
 IT 467224-56-2P 467224-58-4P 467224-60-8P  
 (dyeing composition for dyeing  
 keratinous fibers comprising cationic azo-dye)  
 IT 79286-74-1, 3-Acetamidopyrrolidine 467213-60-1  
 (dyeing composition for dyeing  
 keratinous fibers comprising cationic azo-dye)  
 REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 16 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:777680 HCAPLUS  
 DOCUMENT NUMBER: 137:283944  
 TITLE: Dyeing composition for dyeing keratinous  
 fibers comprising a cationic azo-dye  
 INVENTOR(S): Vidal, Laurent  
 PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: PCT Int. Appl., 28 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002078658	A1	20021010	WO 2002-FR1136	2002 0402

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FR 2822694	A1	20021004	FR 2001-4467	2001 0402
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FR 2822694	B1	20050204		
EP 1377262	A1	20040107	EP 2002-724398	2002 0402

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2004531503	T2	20041014	JP 2002-576925	2002 0402
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US 2004168263	A1	20040902	US 2004-473611	2004 0122
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US 6881230	B2	20050419		
PRIORITY APPLN. INFO.:			FR 2001-4467	A

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WO 2002-FR1136	W	2002 0402
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OTHER SOURCE(S): MARPAT 137:283944

AB The invention concerns a novel dyeing composition for dyeing keratinous fibers, in particular human hair, comprising a cationic azo dye (Markush structures given). Thus, 2-(4-([1,4]diazepan-1-yl)phenylazo)-1,3-dimethyl-3H-imidazol-1-ium perchlorate (I) was prepared by the reaction of homopiperazine and 2-(4-methoxyphenylazo)-1,3-dimethyl-3H-imidazol-1-ium perchlorate. I

produces a red color.

IT 467217-16-9P

(dyeing composition for dyeing  
keratinous fibers comprising cationic azo-dye)

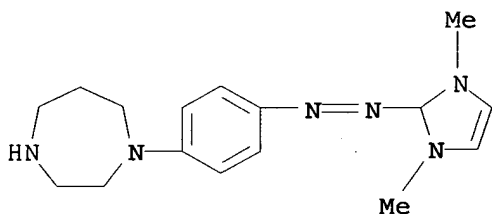
RN 467217-16-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(hexahydro-1H-1,4-diazepin-1-yl)phenyl]azo]-  
1,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

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CRN 467217-15-8

CMF C16 H23 N6

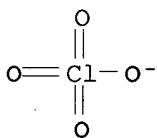


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 14797-73-0

CMF Cl O4



IT 467213-60-1

(dyeing composition for dyeing  
keratinous fibers comprising cationic azo-dye)

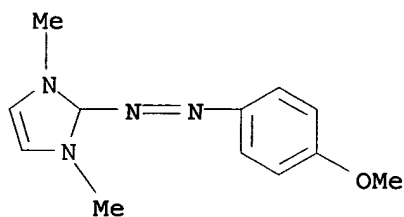
RN 467213-60-1 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-,  
perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 75687-85-3

CMF C12 H15 N4 O

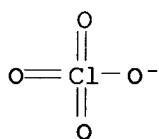


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 14797-73-0

CMF Cl O4



IC ICM A61K007-13

ICS C09B044-16

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 28

IT 467217-16-9P

(dyeing composition for dyeing

keratinous fibers comprising cationic azo-dye)

IT 505-66-8, Homopiperazine 467213-60-1

(dyeing composition for dyeing

keratinous fibers comprising cationic azo-dye)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L26 ANSWER 17 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:777679 HCAPLUS

DOCUMENT NUMBER: 137:283943

TITLE: Dyeing composition for dyeing keratinous  
fibers comprising a cationic azo-dye

INVENTOR(S): Vidal, Laurent; Leduc, Madeleine

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002078657	A1	20021010	WO 2002-FR1135	2002 0402



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 GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
 KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
 MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG,  
 SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,  
 ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT,  
 BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,  
 NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
 ML, MR, NE, SN, TD, TG

FR 2822695                      A1            20021004            FR 2001-4468

2001  
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FR 2822695                      B1            20030725  
 EP 1377261                      A1            20040107            EP 2002-724397

2002  
0402

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
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JP 2004529136                      T2            20040924            JP 2002-576924

2002  
0402

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US 2004123400                      A1            20040701            US 2004-473628

2004  
0223

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US 6884266                      B2            20050426  
 PRIORITY APPLN. INFO.:                      FR 2001-4468            A

2001  
0402

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WO 2002-FR1135                      W

2002  
0402

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OTHER SOURCE(S):                      MARPAT 137:283943

AB The invention concerns a novel dyeing composition for dyeing keratinous  
 fibers, in particular human hair, comprising a cationic azo dye  
 (Markush structures given). Thus, 2-[4-(2-amino-6-chloro-  
 pyrimidin-4-ylamino)phenylazo]-1,3-dimethyl-3H-imidazol-1-ium  
 chloride (I) was prepared by the reaction of 2-amino-4,6-  
 dichloropyrimidine and 2-(4-amino-phenylazo) 1,3-dimethyl-3H-  
 imidazol-1-ium chloride. I produces a yellow-orange color.

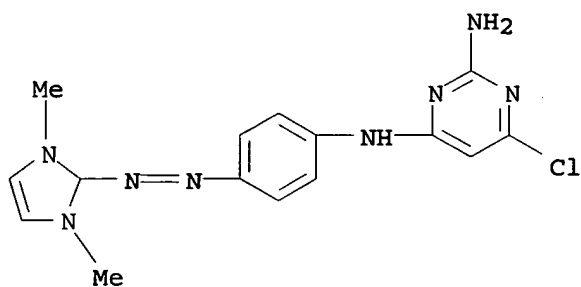
IT 467217-72-7P

(dyeing composition for dyeing

keratinous fibers comprising cationic azo-dye)

RN 467217-72-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-amino-6-chloro-4-  
 pyrimidinyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA  
 INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

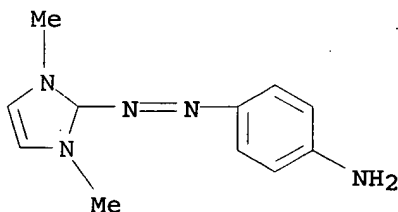
IT 97404-02-9

(dyeing composition for dyeing

keratinous fibers comprising cationic azo-dye)

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride  
(9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

ICS C09B044-16

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 28

IT 467217-72-7P

(dyeing composition for dyeing

keratinous fibers comprising cationic azo-dye)

IT 56-05-3, 2-Amino-4,6-dichloropyrimidine 97404-02-9

(dyeing composition for dyeing

keratinous fibers comprising cationic azo-dye)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L26 ANSWER 18 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:591907 HCAPLUS

DOCUMENT NUMBER: 137:158995

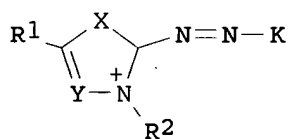
TITLE: Hair dye compositions containing cationic

direct dyes and surfactants  
 INVENTOR(S): Isobe, Mitsuru; Kobayashi, Mikio; Imai, Kenji  
 PATENT ASSIGNEE(S): Hoyu Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

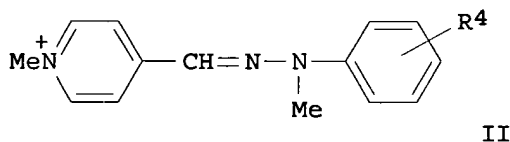
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002220329	A2	20020809	JP 2001-17423	2001 0125

PRIORITY APPLN. INFO.: JP 2001-17423 2001  
0125

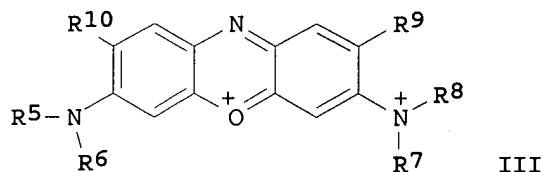
OTHER SOURCE(S): MARPAT 137:158995  
GI



I



II



III

AB The compns. contain cationic direct dyes selected from heterocyclic compds. I, II, and III [X = O, S, NR<sub>3</sub>; Y = CH, CR<sub>3</sub>, N; R<sub>1</sub> = H, C1-4 alkyl, nitro, amino, C1-4 monoalkylamino, di(C1-4 alkyl)amino; R<sub>2</sub>, R<sub>3</sub> = (substituted) C1-4 alkyl; K = aniline residue, phenolic coupling component residue, heterocyclic coupling component residue; when X = NMe, Y = N, and R<sub>1</sub> = R<sub>2</sub> = Me, then K ≠ N,N-dimethylaniline residue; R<sub>4</sub> = H, halo, C1-4 alkyl, C1-4 alkoxy; R<sub>5</sub>-R<sub>8</sub> = H, C1-4 alkyl, at least one of R<sub>5</sub>-R<sub>8</sub> is C1-4 alkyl; R<sub>5</sub> = R<sub>6</sub> = R<sub>7</sub> = R<sub>8</sub> ≠ Et; R<sub>9</sub>, R<sub>10</sub> = H, C1-4 alkyl, C1-4 alkoxy; A<sup>-</sup> = anion] and surfactants selected from higher fatty acid diethylaminoethylamides, alkyltrimethylammoniumacetate betaine, fatty acid amidopropyltrimethylammoniumacetate betaine, N-acylaminoethyl-N-2-hydroxyethylglycine salts, and N-[3-(C<sub>12,14</sub> alkyloxy)-2-hydroxypropyl]-L-arginine-HCl salts. Gray hair was uniformly dyed with a composition (pH 9) containing III (R<sub>5</sub> = R<sub>6</sub> = R<sub>9</sub> = R<sub>10</sub> = Me, R<sub>7</sub> = R<sub>8</sub>

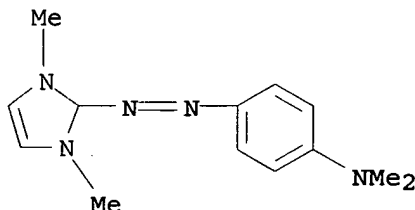
= H, A = Cl) 0.2, I (X = NMe, Y = CH, R1 = H, R2 = Me, K = 4-aminophenyl, A = Cl) 0.4, N-[3-alkyl(12,14)oxy-2-hydroxypropyl]-L-arginine-HCl 10.0, monoethanolamine, and H2O to 100 weight%. The dyed hair showed good wash fastness.

IT 77061-58-6 97404-02-9

(hair dye compns. containing cationic direct dyes and surfactants)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

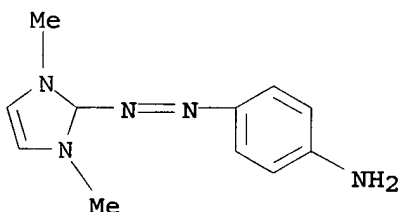


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-aminophenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

ICS D06P001-41; D06P001-42; D06P003-04

CC 62-3 (Essential Oils and Cosmetics)

IT 56-40-6D, Glycine, N-acylaminoethyl-N-(2-hydroxyethyl) derivs., salts 74-79-3D, L-Arginine, N-(3-alkyloxy-2-hydroxypropyl) derivs., hydrochlorides 100-36-7D, fatty acid amides 4292-10-8, Laurylamidopropylbetaine 74447-68-0 77061-58-6 97404-02-9 375348-42-8

(hair dye compns. containing cationic direct dyes and surfactants)

L26 ANSWER 19 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:553059 HCAPLUS

DOCUMENT NUMBER: 137:98675  
 TITLE: Hair dye composition comprising direct dyes, quaternary ammonium compounds, and cationic polymers  
 INVENTOR(S): Grit, Mustafa  
 PATENT ASSIGNEE(S): Goldwell Gmbh, Germany  
 SOURCE: Eur. Pat. Appl., 11 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1224927	A1	20020724	EP 2002-1025	2002 0117

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 DE 10101946 A1 20020801 DE 2001-10101946  
 2001  
0117

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JP 2002249419 A2 20020906 JP 2002-5607  
 2002  
0115

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PRIORITY APPLN. INFO.: DE 2001-10101946 A  
 2001  
0117

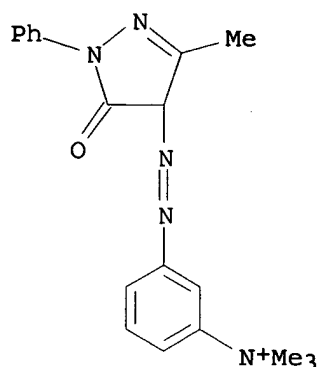
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AB The invention concerns hair dyes that contain direct dyes, long-chain quaternary ammonium compds., cationic polymers, nonionic, amphoteric or zwitterionic polymers, ethanol, propanol or isopropanol and water. The dyes are packaged in a transparent container. Thus a dye contained (weight/weight%): dimethicone copolyol 1.50; cetrimonium chloride 0.80; ethanol 15.00; polyvinylpyrrolidone 0.50; propylene carbonate 15.00; lactic acid (90%) 5.00; sodium hydroxide (32%) 0.20; polyquaternium 6 0.60; quaternary dimethylaminoethylmethacrylate homopolymer 3.50; Acid Orange 7 0.15; Acid Yellow 3 0.10; Acid Violet 43 0.25; water to 100.

IT 68391-31-1, Basic Yellow 57  
 (hair dye composition comprising direct dyes, quaternary ammonium compds., and cationic polymers)

RN 68391-31-1 HCAPLUS

CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

IC ICM A61K007-13  
 CC 62-4 (Essential Oils and **Cosmetics**)  
 IT 64-17-5, Ethanol, biological studies 67-63-0, Isopropanol,  
 biological studies 71-23-8, Propanol, biological studies  
 108-32-7, Propylene carbonate 112-02-7, Cetrimonium chloride  
 112-03-8, Stearyltrimethyl ammonium chloride 632-99-5, Basic  
 Violet 14 633-96-5, Acid Orange 7 2784-89-6, HC-Red 1  
 4065-45-6, Benzophenone-4 4430-18-6, Acid Violet 43 8004-92-0,  
 Acid Yellow 3 9003-39-8, Polyvinylpyrrolidone 25086-89-9,  
 Vinylacetate-vinylpyrrolidone copolymer 26062-79-3,  
 Polyquaternium 6 26161-33-1 26381-41-9, Basic Brown 16  
 68123-13-7, Basic Blue 99 68391-30-0, Basic Red 76  
 68391-31-1, Basic Yellow 57 81859-24-7,  
 Polyquaternium-10 92183-41-0, Polyquaternium-4 473664-54-9,  
 Salcare SC 96

(hair dye composition comprising  
 direct dyes, quaternary ammonium compds., and cationic  
 polymers)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 20 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:293401 HCAPLUS  
 DOCUMENT NUMBER: 136:314756  
 TITLE: Preparation of hair dyeing compositions  
 containing cationic imidazoles  
 INVENTOR(S): Moeckli, Peter  
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.  
 SOURCE: PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2002030374 A1 20020418 WO 2001-EP11706

2001  
1010

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,  
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,  
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG,  
SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,  
ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE,  
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
MR, NE, SN, TD, TG

AU 2002015016 A5 20020422 AU 2002-15016

2001  
1010

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EP 1324741 A1 20030709 EP 2001-983540

2001  
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
BR 2001014586 A 20030826 BR 2001-14586

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1010

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JP 2004510799 T2 20040408 JP 2002-533819

2001  
1010

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US 2003177591 A1 20030925 US 2003-398825

2003  
0410

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PRIORITY APPLN. INFO.: CH 2000-2006 A  
2000  
1012

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WO 2001-EP11706 W  
2001  
1010

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OTHER SOURCE(S): MARPAT 136:314756

AB A method of dyeing keratin-containing fibers, especially human hair, by using cationic imidazole azo dyes is disclosed. Thus, a cationic imidazole azo dye was prepared. This dye 1 g was mixed with 10 g 20% NH3 solution and water to 100 g to give a solution. The solution is combined with the same weight of a 6% H2O2 solution and the mixture is immediately applied to a strand of dark-blonde natural European hair. After 5 min, the strand of hair is rinsed and dried. The naturally present melanin is bleached by the H2O2, while the dye according to the invention is nearly not affected.

IT 412015-77-1P 412015-79-3P 412015-80-6P

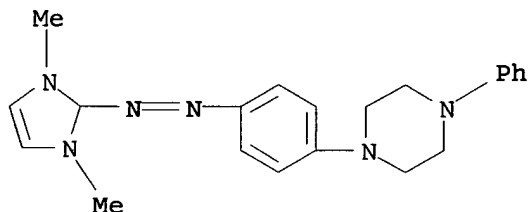
(preparation of hair dyeing compns.

containing cationic imidazoles)

RN 412015-77-1 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(4-phenyl-1-

piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

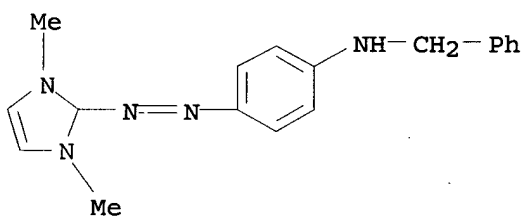


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 412015-79-3 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-[(phenylmethyl)amino]phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

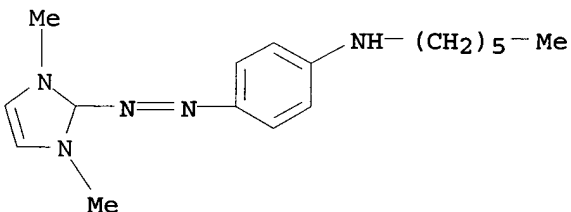


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 412015-80-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(hexylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

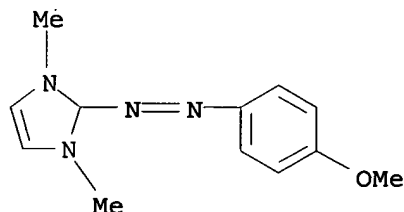
IT 161328-92-3

(preparation of hair dyeing compns.)



containing cationic imidazoles)

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride  
(9CI) (CA INDEX NAME)● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 28, 41

IT 412015-77-1P 412015-79-3P 412015-80-6P

(preparation of hair dyeing compns.

containing cationic imidazoles)

IT 92-54-6 100-46-9, Benzenemethanamine, reactions 111-26-2,

1-Hexanamine 161328-92-3

(preparation of hair dyeing compns.

containing cationic imidazoles)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L26 ANSWER 21 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:30990 HCAPLUS

DOCUMENT NUMBER: 136:90680

TITLE: Hair dye composition containing a methine dye

INVENTOR(S): Ohashi, Yukihiro; Miyabe, Hajime; Matsunaga,  
Kenichi

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1170000	A1	20020109	EP 2001-114799	2001 0627

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT, IE, SI, LT, LV, FI, RO  
JP 2002012526 A2 20020115 JP 2000-193187  
2000

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US 2002032936

A1

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US 2001-8874382001  
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US 6616708

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20030909

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JP 2000-193187

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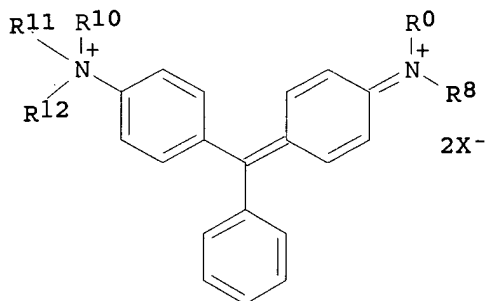
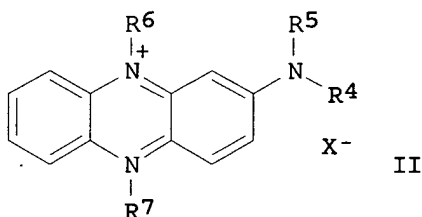
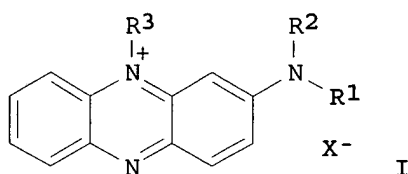
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PRIORITY APPLN. INFO.:

OTHER SOURCE(S):  
GI

MARPAT 136:90680

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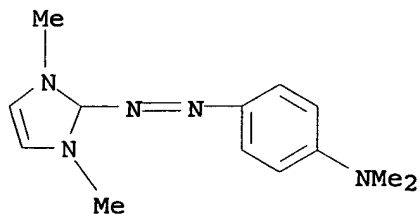
AB The present invention provides a hair dye composition containing a direct cationic dye (I, II, III; R1 = aryl; R2, R4-6, R8-9 = H, C1-6 alkyl, aryl; R3, R7 = aryl; R10-12 = C1-6 alkyl, aryl; A-G = benzene, substituted benzene; X- = anion). A hair dye composition further comprises an oxidizing agent, such as hydrogen peroxide, and an oxidative dye. This hair dye composition has markedly high hair dyeing power, can strongly impart the hair with extremely vivid color ranging from yellow, orange, red, purple, or blue, has less color fade over time and undergoes a small change in the color tone of the dye even after storage.

IT 77061-58-6

(hair dye compns. containing cationic methine dye)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 41

IT 65-61-2 2391-28-8 4215-95-6 5409-37-0 6378-84-3  
 6441-73-2 6528-42-3 7722-84-1, Hydrogen peroxide, biological  
 studies 10114-31-5 10114-32-6 10181-37-0 68123-13-7, Basic  
 Blue 99 77061-58-6 93940-65-9 187413-64-5, Basic  
 Orange 4

(hair dye compns. containing cationic  
 methine dye)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 22 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:9839 HCAPLUS

DOCUMENT NUMBER: 136:74284

TITLE: Hair dye composition

INVENTOR(S): Ohashi, Yukihiro; Miyabe, Hajime; Matsunaga,  
 Kenichi; Totoki, Shintaro; Saito, Yoshinori

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1166757	A2	20020102	EP 2001-114804	2001 0627
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EP 1166757	A3	20030521		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002012530	A2	20020115	JP 2000-193175	2000 0627
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US 2002088063	A1	20020711	US 2001-887473	2001 0625

US 6616709  
PRIORITY APPLN. INFO.:

B2 20030909

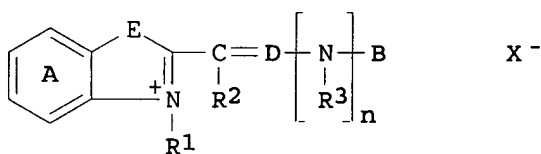
JP 2000-193175

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OTHER SOURCE(S):  
GI

MARPAT 136:74284



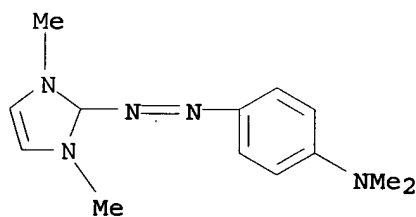
AB The present invention relates to a hair dye composition having high dyeing power, can strongly impart the hair with an extremely vivid color ranging from green-yellow, yellow, red to blue, has less color fade over time and undergoes a small change in the color tone of the dye after storage. A hair dye composition comprises, as a direct dye, a compound I (R1 = C1-6 alkyl; R2 = divalent group bonded to B; R3 = forms a ring together with R2; n = 0, 1; A = benzene ring which may have a substituent or may further be cyclocondensed with another aromatic ring; B = aryl group which may have a substituent or may be coupled with R2 to form a heterocyclic structure; D = N, CR4; R4 = H, C1-6 alkyl; E = NR5, CR6R7, CR6:CR7, O, S; R5 = C1-6 alkyl; R6, R7 = H, C1-6 alkyl; X = anion). A hair dye composition further comprises an oxidizing agent, e.g., hydrogen peroxide, and an oxidative dye.

IT 77061-58-6

(hair dye composition containing a direct dye, oxidative dye and oxidizing agent)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 7722-84-1, Hydrogen peroxide, biological studies 53350-83-7  
61519-44-6 61519-46-8 61537-97-1 61537-98-2 68123-13-7,

Basic Blue 99 75447-05-1 77061-58-6 93940-65-9  
 383890-83-3 383890-85-5 383890-86-6 383890-87-7  
 383890-88-8 383890-89-9 383890-90-2 383890-91-3  
 383890-92-4 383890-93-5 383890-94-6 383890-95-7

(hair dye composition containing a direct  
 dye, oxidative dye and oxidizing agent)

L26 ANSWER 23 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:9838 HCAPLUS

DOCUMENT NUMBER: 136:74283

TITLE: Hair dye composition

INVENTOR(S): Ohashi, Yukihiro; Miyabe, Hajime; Matsunaga,  
 Kenichi; Totoki, Shinatro; Saito, Yoshinori

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

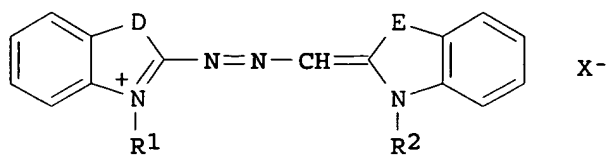
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1166756	A2	20020102	EP 2001-114803	2001 0627
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EP 1166756	A3	20020417		
EP 1166756	B1	20050420		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002012523	A2	20020115	JP 2000-193176	2000 0627
<--				
US 2002026676	A1	20020307	US 2001-886982	2001 0625
<--				
US 6475248	B2	20021105		
EP 1362578	A1	20031119	EP 2002-10153	2002 0513
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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			JP 2000-193176	A
				2000 0627
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OTHER SOURCE(S): MARPAT 136:74283  
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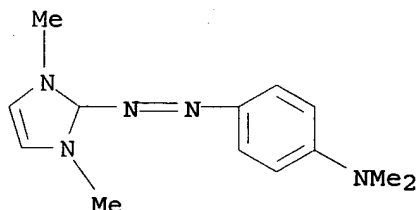
AB The present invention relates to a hair dye composition having markedly high dyeing power, can strongly impart the hair with an extremely vivid color ranging from green-yellow to yellow, has less color fade over time and undergoes a small change in the color tone of the dye after storage. A hair dye composition comprises, as a direct dye, a compound I (R1, R2 = C1-6 alkyl; A, B = a benzene ring which may have a substituent and may further be cyclocondensed with another aromatic ring; D, E = NR3, S; R3 = C1-6 alkyl; X = anion). Basic Yellow 24 is given as a specific example of the direct dye. A hair dye composition further comprises an oxidizing agent, such as hydrogen peroxide, and an oxidative dye.

IT 77061-58-6

(hair dye composition containing direct dye, oxidative dye and oxidizing agent)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 2390-60-5, Basic Blue 7 7722-84-1, Hydrogen peroxide, biological studies 52435-14-0, Basic Yellow 24 68123-13-7, Basic Blue 99 77061-58-6

(hair dye composition containing direct dye, oxidative dye and oxidizing agent)

L26 ANSWER 24 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:9837 HCAPLUS

DOCUMENT NUMBER: 136:74282

TITLE: Hair dye composition

INVENTOR(S): Ohashi, Yukihiro; Miyabe, Hajime; Matsunaga, Kenichi; Totoki, Shintaro; Saito, Yoshinori

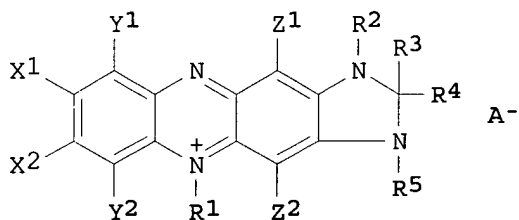
PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
EP 1166755	A2	20020102	EP 2001-114802	2001 0627
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EP 1166755	A3	20020403		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002012531	A2	20020115	JP 2000-193179	2000 0627
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US 2002020030	A1	20020221	US 2001-891202	2001 0626
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US 6689173	B2	20040210		
PRIORITY APPLN. INFO.:			JP 2000-193179	A 2000 0627
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OTHER SOURCE(S):	MARPAT 136:74282			
GI				



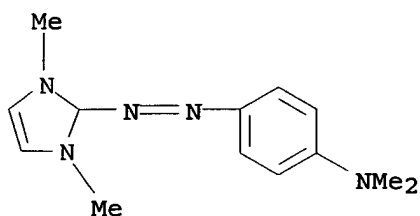
AB The present invention relates to a hair dye composition having markedly high dyeing power, can strongly impart the hair with an extremely vivid red color, has less color fade over time and undergoes a small change in the color tone of the dye after storage. A hair dye composition comprises, as a direct dye, a compound I (R1-4 = C1-6 alkyl, alkenyl, aryl; R5 = H, C1-6 alkyl, alkenyl, aryl, acyl; X1, X2 = H, halogen; Y1, Y2 = H, C1-6 alkyl, alkenyl, C1-6 alkoxy, halogen; Z1, Z2 = H, C1-6 alkyl, alkenyl, C1-6 alkoxy, nitro, halogen; A = anion). A hair dye composition further comprises an oxidizing agent, such as hydrogen peroxide, and an oxidative dye.

IT 77061-58-6

(hair dye composition containing a direct dye, oxidative dye, and oxidizing agent)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 7722-84-1, Hydrogen peroxide, biological studies 68123-13-7,

Basic Blue 99 77061-58-6 93940-65-9 109174-48-3

109174-59-6 109174-74-5 383426-28-6 383426-29-7

383426-30-0

(hair dye composition containing a direct  
dye, oxidative dye, and oxidizing agent)

L26 ANSWER 25 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:9836 HCAPLUS

DOCUMENT NUMBER: 136:74281

TITLE: Hair dye composition

INVENTOR(S): Ohashi, Yukuhiro; Miyabe, Hajime; Matsunaga,  
Kenichi; Totoki, Shintaro; Saito, Yoshinori

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1166754	A2	20020102	EP 2001-114801	2001 0627
EP 1166754	A3	20040204		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002012533	A2	20020115	JP 2000-193182	2000 0627
US 2002032935	A1	20020321	US 2001-887437	2001 0625
US 6607563	B2	20030819		
PRIORITY APPLN. INFO.:			JP 2000-193182	A 2000



0627

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OTHER SOURCE(S): MARPAT 136:74281

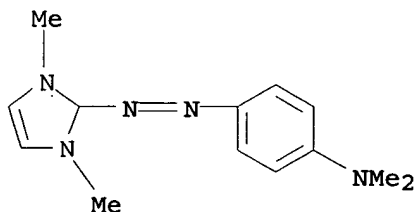
AB The present invention relates to a hair dye composition having markedly high dyeing power, can strongly impart the hair with an extremely vivid color ranging from yellow, red, purple to blue, has less color fade over time and undergoes a small change in the color tone of the dye after storage. A hair dye composition comprises a direct dye, and further comprises an oxidizing agent, such as hydrogen peroxide, and an oxidative dye.

IT 77061-58-6 169322-10-5 383907-74-2  
383907-75-3 383907-89-9

(hair dye composition)

RN 77061-58-6 HCAPLUS

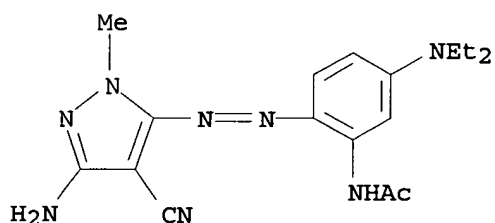
CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 169322-10-5 HCAPLUS

CN Acetamide, N-[2-[(3-amino-4-cyano-1-methyl-1H-pyrazol-5-yl)azo]-5-(diethylamino)phenyl]- (9CI) (CA INDEX NAME)



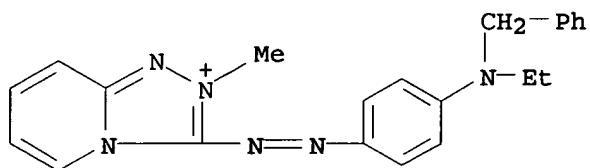
RN 383907-74-2 HCAPLUS

CN Zincate(2-), tetrachloro-, (T-4)-, bis[3-[[4-ethyl(phenylmethyl)amino]phenyl]azo]-2-methyl-1,2,4-triazolo[4,3-alpyridinium] (9CI) (CA INDEX NAME)

CM 1

CRN 383907-73-1

CMF C22 H23 N6

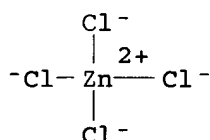


CM 2

CRN 15201-05-5

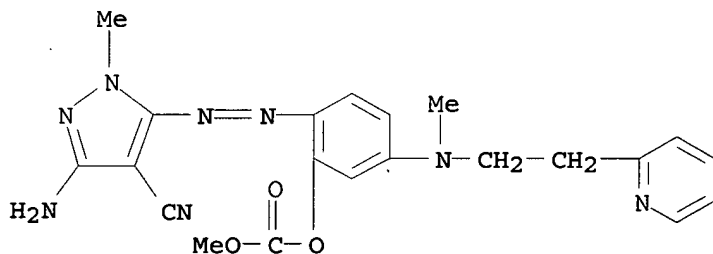
CMF Cl4 Zn

CCI CCS



RN 383907-75-3 HCAPLUS

CN Carbonic acid, 2-[(3-amino-4-cyano-1-methyl-1H-pyrazol-5-yl)azo]-5-[methyl[2-(2-pyridinyl)ethyl]amino]phenyl methyl ester (9CI) (CA INDEX NAME)



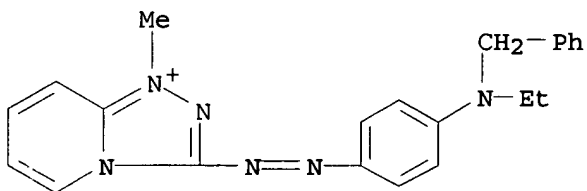
RN 383907-89-9 HCAPLUS

CN Zincate(2-), tetrachloro-, (T-4)-, bis[3-[[4-[ethyl(phenylmethyl)amino]phenyl]azo]-1-methyl-1,2,4-triazolo[4,3-a]pyridinium] (9CI) (CA INDEX NAME)

CM 1

CRN 383907-88-8

CMF C22 H23 N6

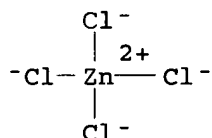


CM 2

CRN 15201-05-5

CMF Cl4 Zn

CCI CCS



IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 4443-99-6 4569-88-4 7722-84-1, Hydrogen peroxide, biological studies 51142-98-4 65974-88-1 77061-58-6 80546-44-7 80546-45-8 93940-65-9 169322-10-5 383907-72-0 383907-74-2 383907-75-3 383907-77-5 383907-79-7 383907-81-1 383907-83-3 383907-85-5 383907-86-6 383907-89-9 (hair dye composition)

L26 ANSWER 26 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:9835 HCAPLUS

DOCUMENT NUMBER: 136:74280

TITLE: Hair dye composition

INVENTOR(S): Ohashi, Yukihiro; Miyabe, Hajime; Matsunaga, Kenichi

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 18 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1166753	A2	20020102	EP 2001-114800	2001 0627
EP 1166753	A3	20040218		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002012534	A2	20020115	JP 2000-193186	2000 0627
US 2002038483	A1	20020404	US 2001-891201	2001 0626
US 6623531	B2	20030923		
PRIORITY APPLN. INFO.: JP 2000-193186 A				

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&lt;--

2000  
0627

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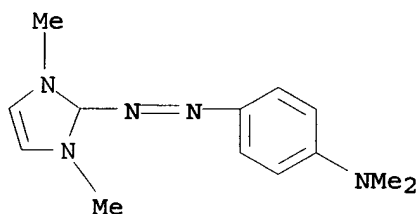
OTHER SOURCE(S): MARPAT 136:74280

AB The present invention relates to a hair dye composition having markedly high dyeing power, can strongly impart the hair with an extremely vivid color ranging from yellow, red, blue to green, has less color fade over time and undergoes a small change in the color tone of the dye after storage. A hair dye composition comprises a direct dye, and further comprises an oxidizing agent, such as hydrogen peroxide, and an oxidative dye.

IT 77061-58-6  
(hair dye composition containing direct dye, oxidative dye and oxidizing agent)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 605-91-4 634-21-9 897-55-2 905-96-4 905-97-5 977-96-8  
 1612-64-2 1628-58-6 2197-01-5 3065-70-1 3065-71-2  
 3065-79-0 3520-43-2 4727-49-5 4727-50-8 6285-94-5  
 7722-84-1, Hydrogen peroxide, biological studies 13056-24-1  
 14187-31-6 14331-21-6 14806-50-9 15185-40-7 16025-99-3  
 18300-31-7 18359-88-1 20185-07-3 20591-23-5 24675-13-6  
 25962-03-2 27425-55-4 32151-96-5 32682-09-0 34442-71-2  
 35795-44-9 38215-36-0 39201-42-8 39941-19-0 40442-45-3  
 41044-12-6 41664-70-4 42371-36-8 53060-69-8 53213-81-3  
 64285-44-5 77061-58-6 77375-94-1 83846-68-8  
 92452-76-1 93940-65-9 98473-04-2 117214-27-4 155306-71-1  
 230628-67-8 383871-62-3 383871-74-7 383871-77-0  
 383871-87-2 383871-92-9

(hair dye composition containing direct dye, oxidative dye and oxidizing agent)

L26 ANSWER 27 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:9834 HCAPLUS

DOCUMENT NUMBER: 136:58514

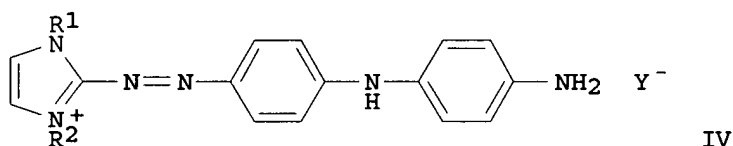
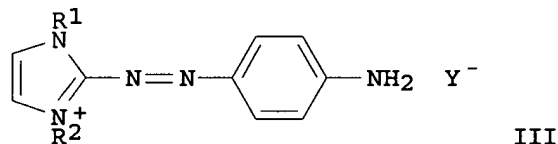
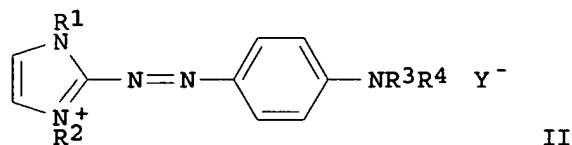
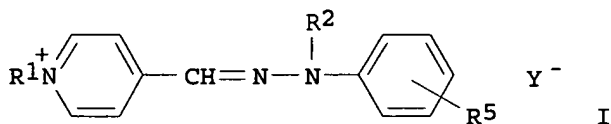
TITLE: Hair dye compositions containing cationic direct dyes

INVENTOR(S): Grit, Mustafa

PATENT ASSIGNEE(S): Goldwell G.m.b.H., Germany; KPSS KAO  
Professional Salon SE

SOURCE: Eur. Pat. Appl., 11 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1166752	A2	20020102	EP 2001-114735	2001 0622
EP 1166752	A3	20030122		
EP 1166752	B1	20040407		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 10031014	A1	20020110	DE 2000-10031014	2000 0623
EP 1362580	A1	20031119	EP 2003-12471	2001 0622
EP 1362580	B1	20050302		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI, MK, CY, AL, TR				
AT 263543	E	20040415	AT 2001-114735	2001 0622
AT 289795	E	20050315	AT 2003-12471	2001 0622
PRIORITY APPLN. INFO.:			DE 2000-10031014	A 2000 0623
			EP 2001-114735	A3 2001 0622
OTHER SOURCE(S):	MARPAT 136:58514			
GI				

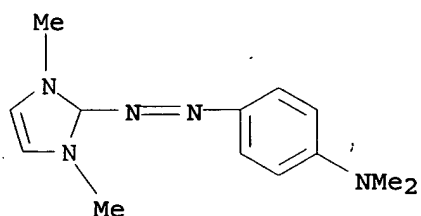


AB The invention concerns hair dye compns. that contain aryl-azo, imidazole-azo derivs. as cationic direct dyes, anionic sunscreens and amphoteric or zwitterionic surfactants. Cationic dyes of the general formula (I), (II), (III) and (IV) where R1, R2, R4 and R5 are H, CH3 or C2H5 and R3 is OMe or OEt and Y is an anion, are used in the dyeing shampoos, conditioners, hair tonics. Thus a composition contained (weight/weight%): sodium C12-C14 alkylether sulfate (2-3 EO) 10.00; cocoamidopropylbetaine 2.00; PEG-3-distearate 2.00; Benzophenone-3 0.50; 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]imidazolium chloride 0.10; Basic Red 2 0.05; citric acid as preservative q.s.; water to 100.

IT 77061-58-6, 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride  
 89923-52-4, 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride 97404-02-9,  
 1H-Imidazolium, 2-[[4-(4-aminophenyl)azo]-1,3-dimethyl-, chloride  
 178822-03-2, 1H-Imidazolium, 2-[[4-[[4-(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride  
 (hair dye compns. containing cationic direct dyes)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

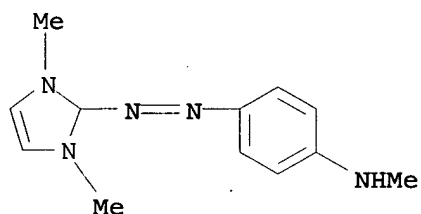


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 89923-52-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

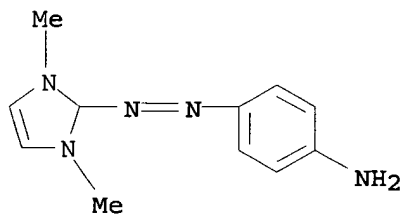


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

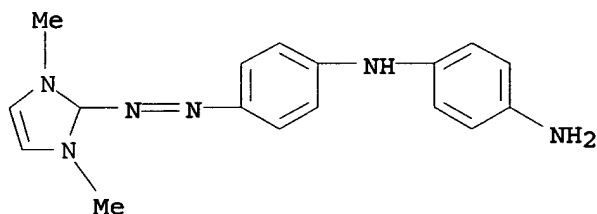


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-03-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and **Cosmetics**)

IT 131-57-7, Benzophenone-3 **77061-58-6**, 1H-Imidazolium,  
2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride  
**89923-52-4**, 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride **97404-02-9**,  
1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride  
**178822-03-2**, 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride  
375823-48-6

(**hair dye compns.** containing cationic  
direct dyes)

L26 ANSWER 28 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:885299 HCAPLUS

DOCUMENT NUMBER: 136:10894

TITLE: Hair dye compositions containing cationic  
direct dyes

PATENT ASSIGNEE(S): Goldwell G.m.b.H., Germany

SOURCE: Ger. Gebrauchsmusterschrift, 22 pp.

CODEN: GGXXFR

DOCUMENT TYPE: **Patent**

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 20011207	U1	20011206	DE 2000-20011207	2000 0623

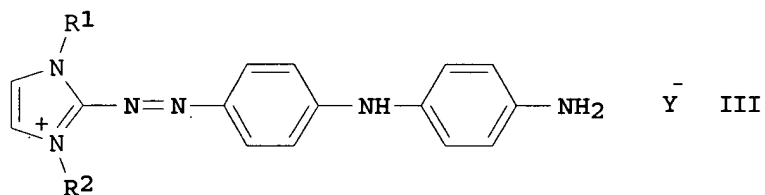
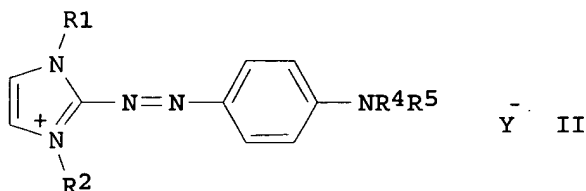
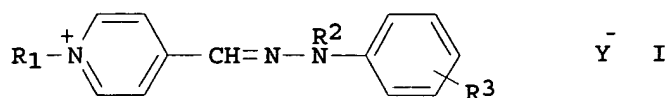
PRIORITY APPLN. INFO.:

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DE 2000-20011207  
2000  
0623

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GI





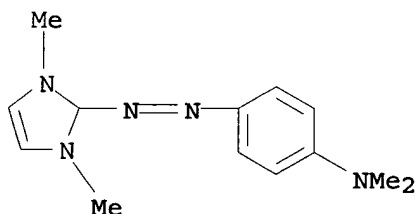
AB The invention concerns hair dye compns. that contain aryl-azo, imidazole-azo derivs. as cationic direct dyes, and amphoteric or zwitterionic surfactants. Cationic dyes of the general formula (I), (II), (III) where R<sub>1</sub>, R<sub>2</sub>, R<sub>4</sub> and R<sub>5</sub> are H, CH<sub>3</sub> or C<sub>2</sub>H<sub>5</sub> and R<sub>3</sub> is OMe or OEt and Y is an anion, are used in dyeing shampoos, conditioners, hair tonics. The compns. contain cocoamidobetaine. Thus a composition contained cetylstearyl alc. 5.0; 1,2-propanediol 1.5; behentrimonium chloride 2.0; Di-C12-C15-alkyldimonium chloride 1.0; cocoamidopropylbetaine 1.0; sodium cocoamidoamphoacetate 0.5; henna extract 0.5; 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]imidazolium chloride 0.1; methylparaben 0.2; silicon oil 0.5; perfume 0.3; water to 100.

IT 77061-58-6 89923-52-4 97404-02-9  
178822-03-2

(hair dye compns. containing cationic direct dyes)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

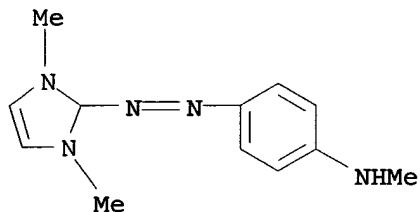


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 89923-52-4 HCAPLUS

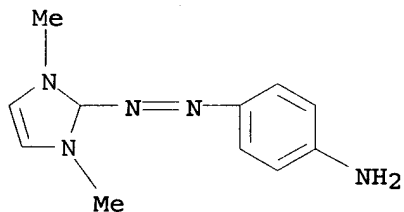
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

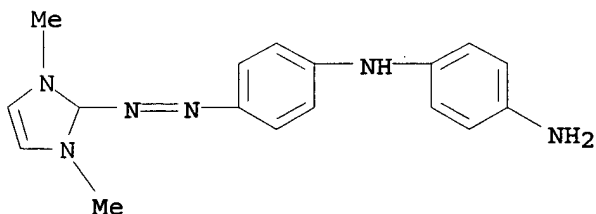
CN 1H-Imidazolium, 2-[[4-(aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-03-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[[4-(aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 112-02-7, Cetyltrimethylammonium chloride 1812-53-9,  
Dicetyldimethylammonium chloride 77061-58-6

89923-52-4 97404-02-9 178822-03-2

375348-42-8 375349-67-0 375823-48-6

(hair dye compns. containing cationic  
direct dyes)

L26 ANSWER 29 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:864690 HCAPLUS

DOCUMENT NUMBER: 136:10906

TITLE: Hair dye compositions containing cationic  
direct dyes

PATENT ASSIGNEE(S): Goldwell GmbH, Germany

SOURCE: Ger. Gebrauchsmusterschrift, 23 pp.

CODEN: GGXXFR

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

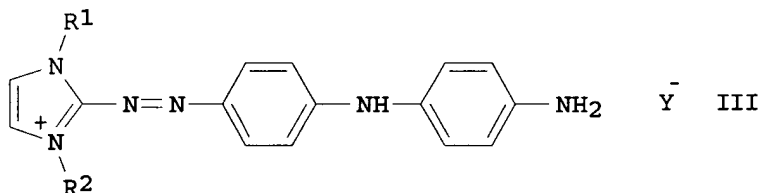
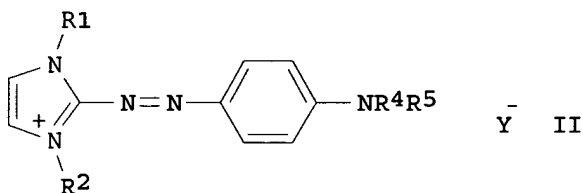
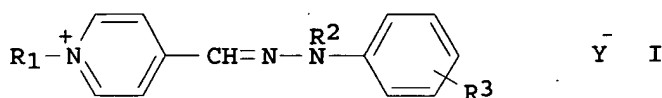
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 20011210	U1	20011129	DE 2000-20011210	2000 0623

PRIORITY APPLN. INFO.:

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DE 2000-20011210  
2000  
0623

OTHER SOURCE(S): MARPAT 136:10906  
GI

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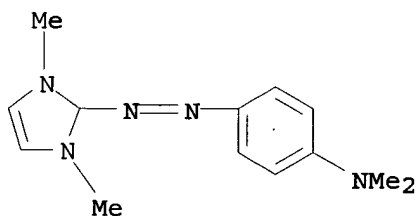
AB The invention concerns hair dye compns. that contain aryl-azo, imidazole-azo derivs. as cationic direct dyes, anionic sunscreens and amphoteric or zwitterionic surfactants. Cationic dyes of the general formula (I), (II), (III) where R1 ,R2 ,R4 and R5 are H, CH3 or C2H5 and R3 is OMe or OEt and Y is an anion, are used in the dyeing shampoos, conditioners, hair tonics. Thus a composition contained (weight/weight%): sodium C12-C14 alkylether sulfate (2-3 EO) 10.00; cocoamidoprpylbetaine 2.00; PEG-3-distearate 2.00; Benzophenone-3 0.50; 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]imidazolium chloride 0.10; Basic Red 2 0.05; citric acid as preservative q.s.; water to 100.

IT 77061-58-6 89923-52-4 97404-02-9  
178822-03-2

(hair dye compns. containing cationic direct dyes)

RN 77061-58-6 HCAPLUS

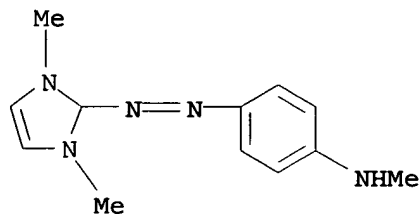
CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

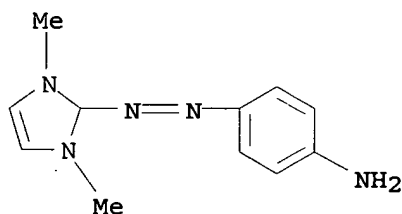
RN 89923-52-4 HCAPLUS  
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

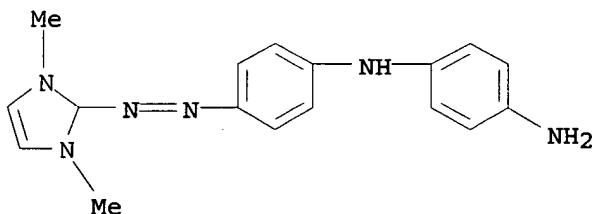
RN 97404-02-9 HCAPLUS  
CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-03-2 HCAPLUS  
CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13  
 CC 62-4 (Essential Oils and Cosmetics)  
 IT 131-57-7, Benzophenone-3 77061-58-6 89923-52-4  
 97404-02-9 178822-03-2 375348-42-8  
 375823-48-6

(hair dye compns. containing cationic  
 direct dyes)

L26 ANSWER 30 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:823299 HCAPLUS

DOCUMENT NUMBER: 135:362335

TITLE: Hair bleaching and dyeing compositions  
 containing multiple kinds of direct dyes

INVENTOR(S): Matsunaga, Kenichi; Miyabe, Hajime

PATENT ASSIGNEE(S): Kao Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

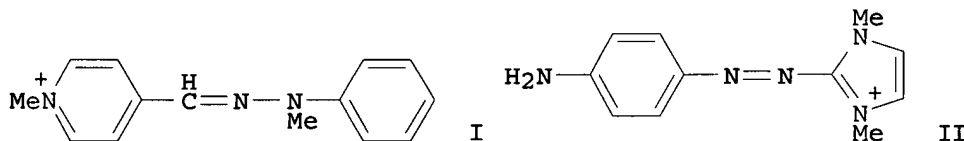
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001316231	A2	20011113	JP 2000-138467	2000 0511
EP 1153598	A2	20011114	EP 2001-110126	2001 0503
EP 1153598	A3	20020327		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			JP 2000-138467	A 2000 0511

GI



AB The compns. comprise (A) compns. containing alkalies, azo dyes, and Basic Blue 99, 47, Disperse Blue 1, 3, 7, 72, Disperse Violet 1, 4, 15, and/or 27, and (B) compns. containing H<sub>2</sub>O<sub>2</sub>. The compns. may be three-component ones comprising (C) compns. containing alkalies, (D) compns. containing H<sub>2</sub>O<sub>2</sub>, and (E) the direct dyes. Thus, black hair was treated with a two-component composition containing azo dyes I, II (X- = anion), Disperse Blue 3, ammonia, and aqueous H<sub>2</sub>O<sub>2</sub> to simultaneously

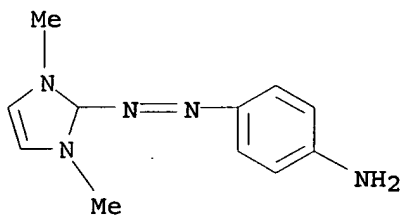
bleach the hair and dye brown color.

IT 46725-59-1 50578-71-7 50578-85-3  
372491-75-3

(storage-stable hair dyeing compns  
containing multiple kinds of direct dyes)

RN 46725-59-1 HCAPLUS

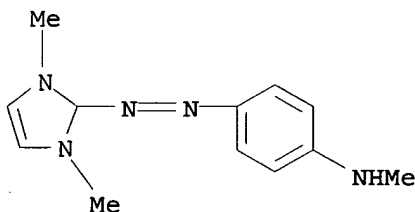
CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl- (9CI) (CA  
INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 50578-71-7 HCAPLUS

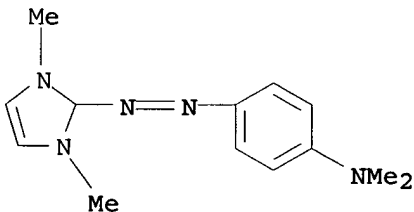
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]- (9CI)  
(CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 50578-85-3 HCAPLUS

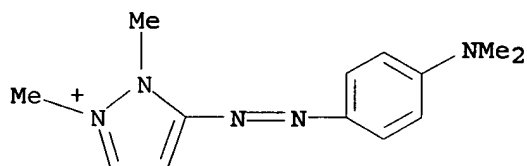
CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-  
(9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 372491-75-3 HCAPLUS

CN 1H-Pyrazolium, 5-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-  
(9CI) (CA INDEX NAME)

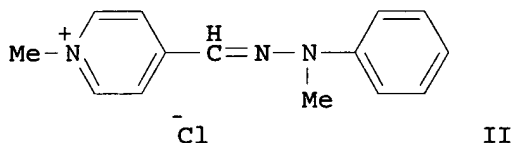
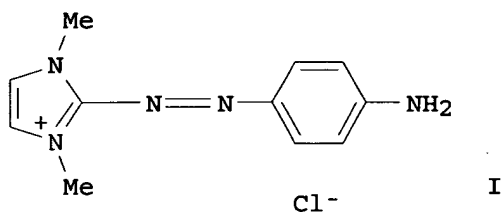


IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 81-48-1, Disperse Blue 72 128-95-0, Disperse Violet 1  
 1220-94-6, Disperse Violet 4 2475-45-8, Disperse Blue 1  
 2475-46-9, Disperse Blue 3 3179-90-6, Disperse Blue 7  
 7722-84-1, Hydrogen peroxide, biological studies 12217-43-5,  
 Basic Blue 47 13520-96-2 19286-75-0, Disperse Violet 27  
 46725-59-1 50578-71-7 50578-85-3  
 61548-19-4 68123-13-7, Basic Blue 99 68912-01-6 110420-82-1  
 360069-60-9, C.I. Disperse Violet 15 372491-75-3  
 (storage-stable hair dyeing compns  
 . containing multiple kinds of direct dyes)

L26 ANSWER 31 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2001:822457 HCAPLUS  
 DOCUMENT NUMBER: 135:362332  
 TITLE: Storage-stable hair dyeing compositions  
 containing multiple kinds of direct dyes  
 INVENTOR(S): Miyabe, Hajime; Matsunaga, Kenichi  
 PATENT ASSIGNEE(S): Kao Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001316230	A2	20011113	JP 2000-138466	2000 0511
EP 1153599	A2	20011114	EP 2001-111103	2001 0508
EP 1153599	A3	20030514		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			JP 2000-138466	A 2000 0511
OTHER SOURCE(S):				
GI				





AB The compns. contain (A) azomethine group-containing heterocycles and (B) Basic Blue 7, 26, 47, 99, Basic Violet 1, 3, 4, 10, 14, Disperse Blue 1, 3, 7, 72, Disperse Violet 1, 4, 15, and/or 27. Thus, goat hair was dyed brown with an aqueous solution (pH 8.5-9) containing I, II, and Basic Blue 7. When the solution was stored at 25° for 30 days, its dyeability was as same as a freshly prepare solution

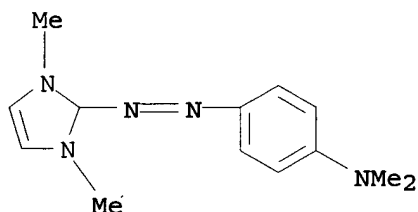
IT 77061-58-6 97404-02-9

(storage-stable hair dyeing compns

. containing multiple kinds of direct dyes)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

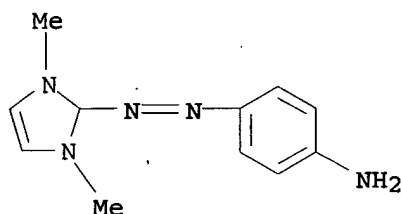


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 81-48-1, Disperse Blue 72 81-88-9, Basic Violet 10 128-95-0,  
Disperse Violet 1 548-62-9, Basic Violet 3 632-99-5, Basic  
Violet 14 1220-94-6, Disperse Violet 4 2390-59-2 2390-60-5,  
Basic Blue 7 2475-45-8, Disperse Blue 1 2475-46-9, Disperse  
Blue 3 2580-56-5, Basic Blue 26 3179-90-6, Disperse Blue 7  
8004-87-3, Basic Violet 1 12217-43-5, Basic Blue 47  
19286-75-0, Disperse Violet 27 42476-20-0 68123-13-7, Basic  
Blue 99 77061-58-6 97404-02-9 360069-60-9,  
C.I. Disperse Violet 15

(storage-stable hair dyeing compns

. containing multiple kinds of direct dyes)

L26 ANSWER 32 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:796234 HCAPLUS

DOCUMENT NUMBER: 135:348711

TITLE: Oxidative hair dye compositions comprising  
1-(4-aminophenyl)-pyrrolidine derivatives and  
a particular direct dye

INVENTOR(S): Kravtchenko, Sylvain; Lagrange, Alain

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: Eur. Pat. Appl., 100 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1149575	A1	20011031	EP 2001-400879	2001 0405

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2807650	A1	20011019	FR 2000-4991	2000 0418

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FR 2807650	B1	20020524		
JP 2001335446	A2	20011204	JP 2001-120414	

2001  
0418

US 2002095732

A1

20020725

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US 2001-8366002001  
0418

US 2003084516

A9

20030508

PRIORITY APPLN. INFO.:

FR 2000-4991

A

2000  
0418

&lt;--

OTHER SOURCE(S): MARPAT 135:348711

AB Oxidative hair dye compns. comprise 1-(4-aminophenyl)-pyrrolidine and a particular direct dye such as nitrobenzene derivs. or quaternary ammonium derivs. A hair dye contained 1-(4-aminophenyl)-pyrrolidine dihydrochloride 0.235, 2,4-diamino-1-( $\beta$ -hydroxyethyloxy)-benzene dihydrochloride 0.241, Basic Red-51 0.168, excipients and water q.s. 100 g. Equal amount of the composition is mixed with 20 vol hydrogen peroxide and applied on the hair for 30 min, the hair is then rinsed, washed with a shampoo, rinsed, and dried.

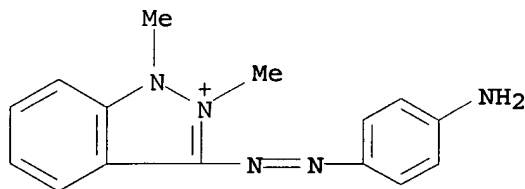
IT 6687-56-5 7267-43-8 41338-82-3  
41338-83-4 54940-81-7 62163-15-9  
73447-48-0 75655-00-4 77061-58-6  
83950-26-9 89923-52-4 97404-02-9  
109220-25-9 161328-92-3 161329-06-2  
161329-07-3 161329-08-4 161329-09-5  
161329-15-3 161329-16-4 161329-17-5  
161329-18-6 161329-22-2 161329-23-3  
161329-25-5 161329-27-7 161329-28-8  
161329-29-9 161329-30-2 161329-31-3  
161329-35-7 161329-37-9 161329-39-1  
161329-40-4 161329-42-6 161329-43-7  
161329-44-8 161329-45-9 161329-47-1  
161329-49-3 167382-87-8 167382-88-9  
167382-97-0 167382-98-1 167382-99-2  
178822-03-2 178822-05-4 370871-33-3

(oxidative hair dye compns.

comprising aminophenylpyrrolidine derivs. and particular direct dye)

RN 6687-56-5 HCAPLUS

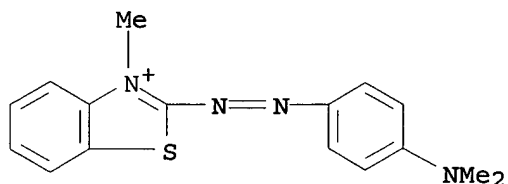
CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
(9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 7267-43-8 HCAPLUS  
 CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 perchlorate (9CI) (CA INDEX NAME)

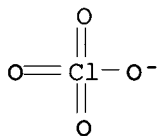
CM 1

CRN 38901-86-9  
 CMF C16 H17 N4 S



CM 2

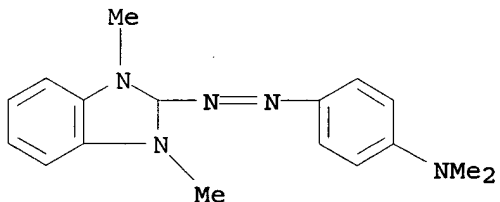
CRN 14797-73-0  
 CMF Cl O4



RN 41338-82-3 HCAPLUS  
 CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
 perchlorate (9CI) (CA INDEX NAME)

CM 1

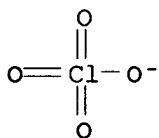
CRN 49873-03-2  
 CMF C17 H20 N5



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

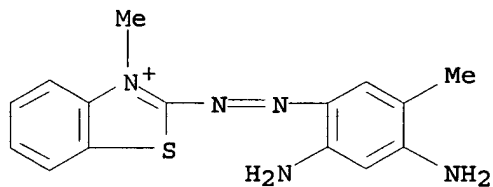
CM 2

CRN 14797-73-0  
 CMF Cl O4



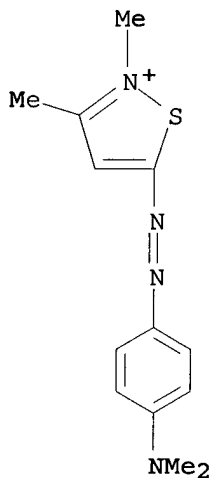
RN 41338-83-4 HCAPLUS

CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-, iodide (9CI) (CA INDEX NAME)



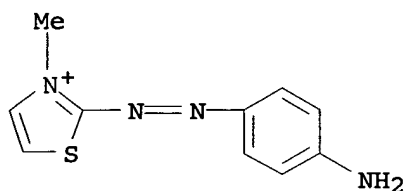
RN 54940-81-7 HCAPLUS

CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



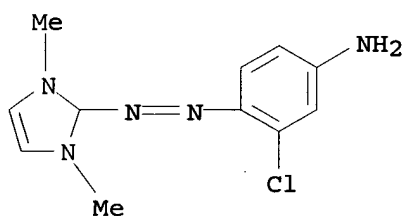
RN 62163-15-9 HCAPLUS

CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



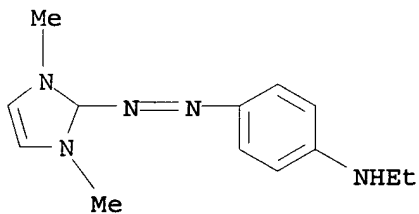
● Cl<sup>-</sup>

RN 73447-48-0 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



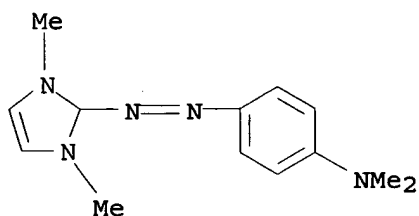
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 75655-00-4 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 77061-58-6 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

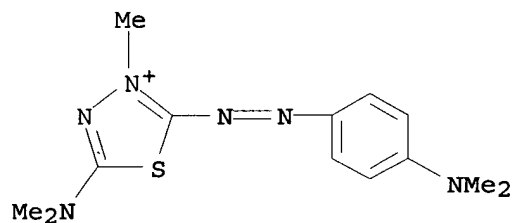
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S



CM 2

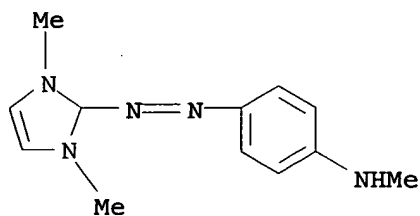
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

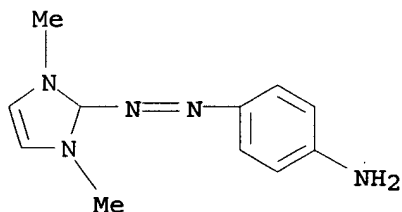


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

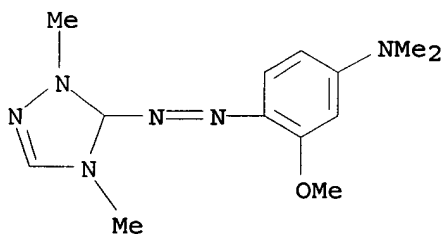


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



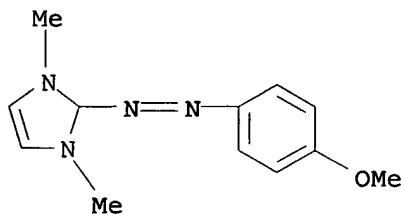
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



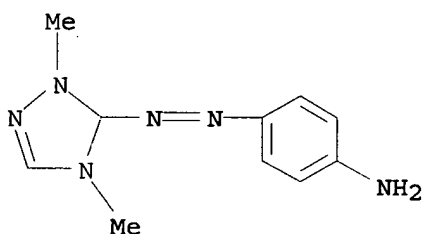


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

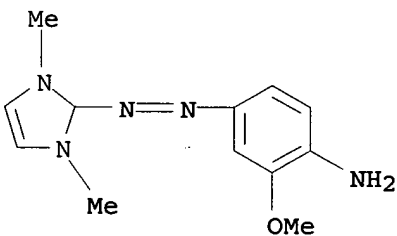


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

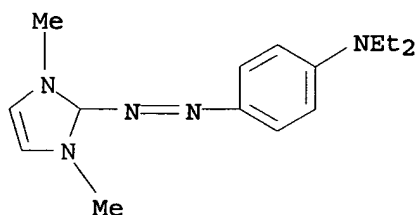


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

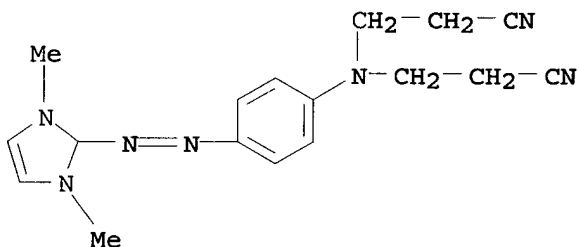


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

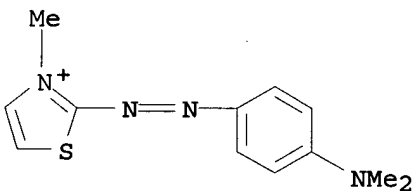


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

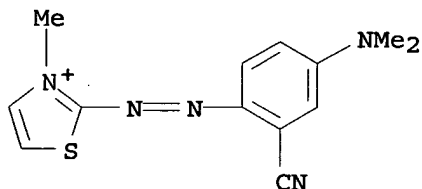


● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

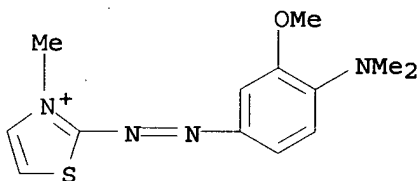
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-,

chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

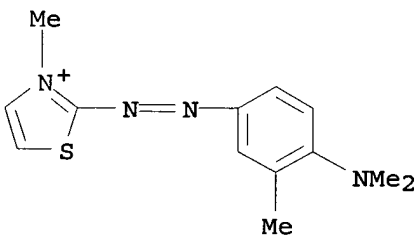
RN 161329-17-5 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

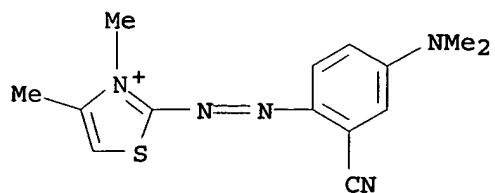
RN 161329-18-6 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

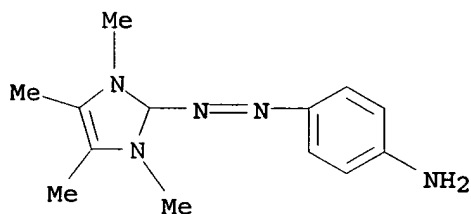
RN 161329-22-2 HCAPLUS

CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS

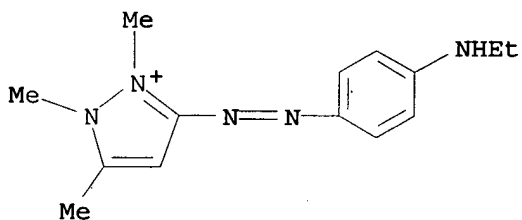
CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

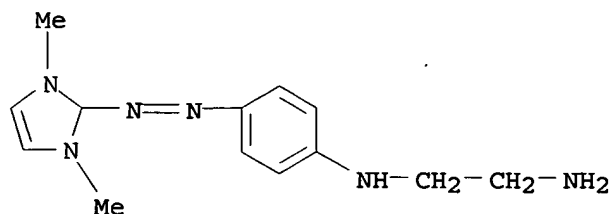
RN 161329-25-5 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(ethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

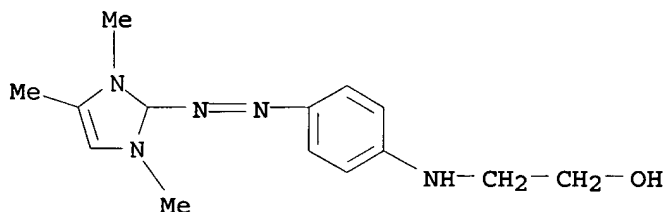


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

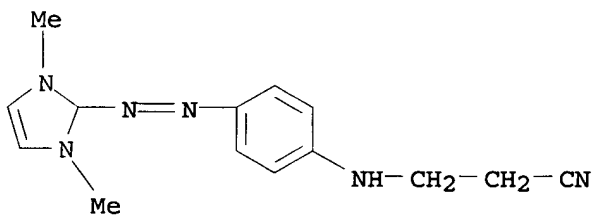


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

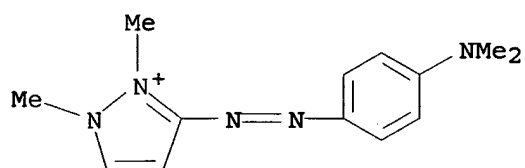


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

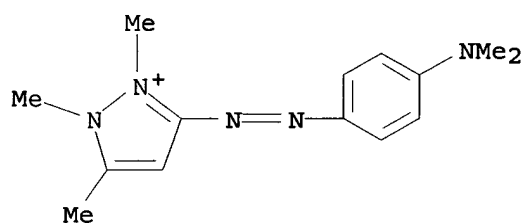
RN 161329-30-2 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS  
 CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-,  
 chloride (9CI) (CA INDEX NAME)

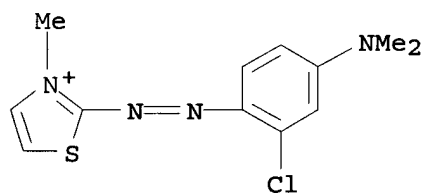


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

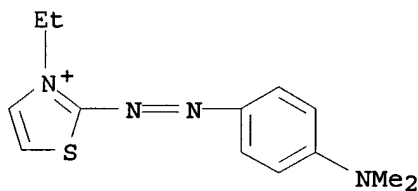
RN 161329-37-9 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

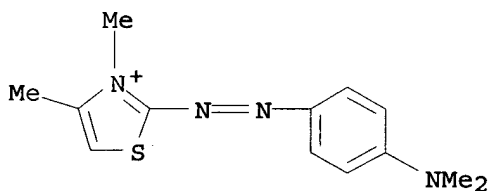
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

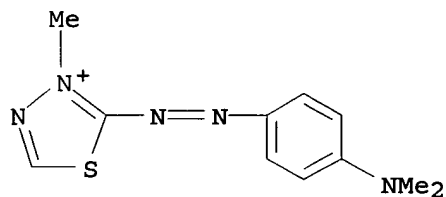
Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-40-4 HCAPLUS  
CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

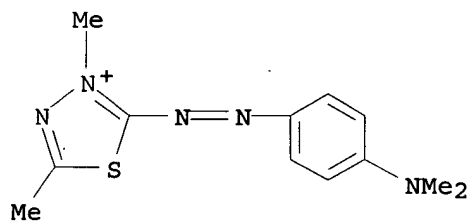
Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-42-6 HCAPLUS  
CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

CRN 21228-90-0

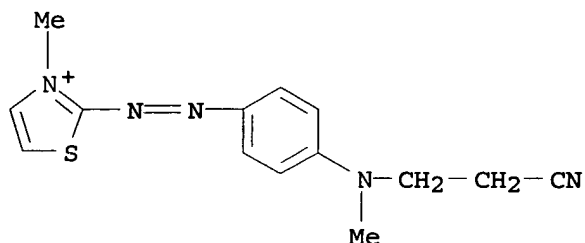
CMF C H3 O4 S



Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-43-7 HCAPLUS

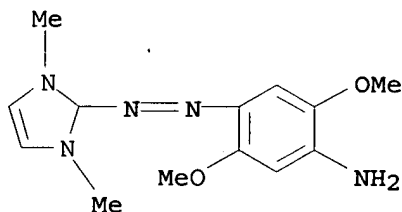
CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

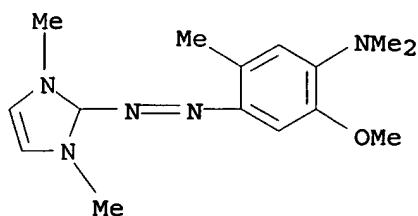


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

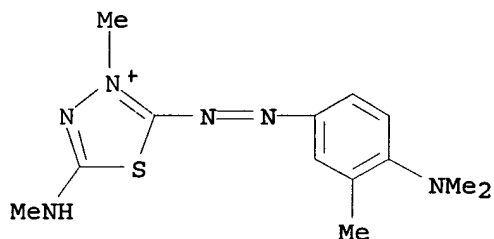
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

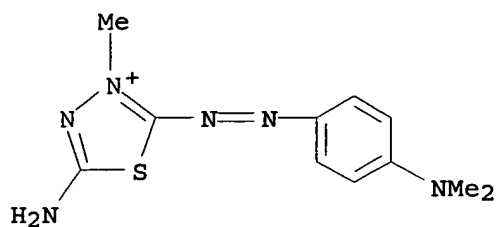
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



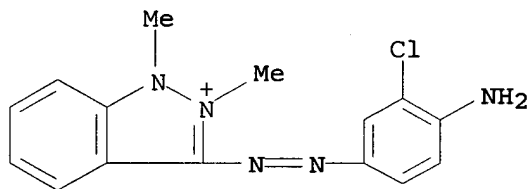
CM 2

CRN 21228-90-0

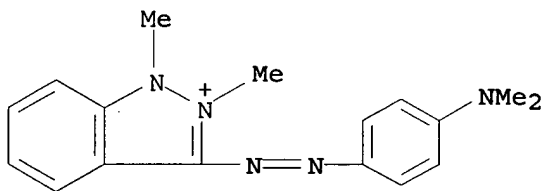
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 167382-87-8 HCAPLUS

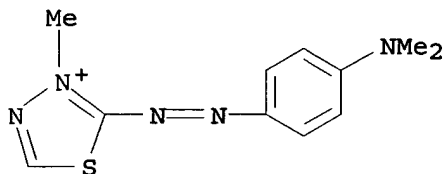
CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS

CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS

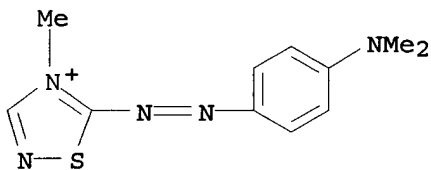
CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS

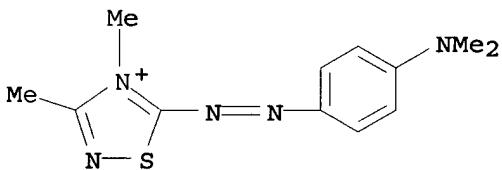
CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS

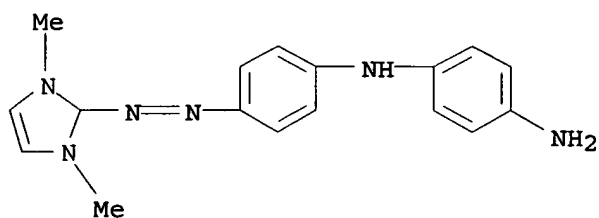
CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

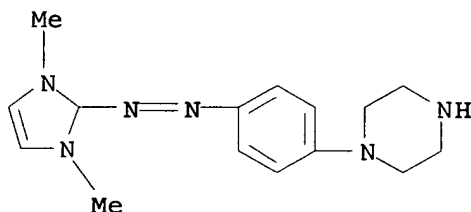


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-aminophenyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

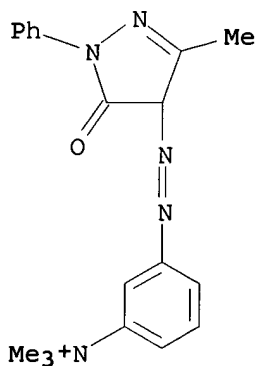


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 370871-33-3 HCAPLUS

CN Benzenaminium, 3-[[4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl]azo]-N,N,N-trimethyl-, (9CI) (CA INDEX NAME)



IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 89-25-8 90-15-3,  $\alpha$ -Naphthol 95-54-5, o-Phenylenediamine, biological studies 95-55-6, o-Aminophenol 95-70-5 95-88-5

99-56-9 99-57-0 106-50-3, 1,4-Benzenediamine, biological studies  
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 7077-55-6 **7267-43-8** 7556-37-8 7575-35-1 7687-09-4  
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 9003-99-0, Peroxidase 9055-15-6, Oxidoreductase 10228-03-2  
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**167382-96-9 167382-97-0 167382-98-1**  
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209323-28-4 211050-61-2 220011-43-8 223577-35-3  
 223577-36-4 223577-37-5 223577-38-6 223577-39-7

(oxidative hair dye compns.

comprising aminophenylpyrrolidine derivs. and particular direct dye)

IT 223577-40-0 223577-41-1 232284-18-3 251352-40-6  
 251352-41-7 251352-42-8 251352-43-9 251352-44-0  
 251352-45-1 251352-46-2 251352-47-3 251352-48-4  
 251352-49-5 251352-50-8 251352-55-3 259545-90-9  
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 370871-30-0 370871-33-3 370871-35-5 370871-37-7  
 370871-48-0 370872-18-7 370872-71-2

(oxidative hair dye compns.

comprising aminophenylpyrrolidine derivs. and particular direct dye)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 33 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:747121 HCAPLUS

DOCUMENT NUMBER: 135:293689

TITLE: Hair dye compositions containing cationic  
 direct dye and surfactants

INVENTOR(S): Miyabe, Hajime; Matsunaga, Kenichi

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1142560	A2	20011010	EP 2001-107830	2001 0406
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EP 1142560	A3	20030514		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

JP 2001288054	A2	20011016	JP 2000-107179	2000 0407
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PRIORITY APPLN. INFO.:	JP 2000-107179	A	2000 0407
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AB Hair dye composition comprises a first part containing an alkaline agent and a second part containing an oxidizing agent, wherein the first part contains (A) the alkaline agent, (B) a cationic direct dye, (C) a nonionic surfactant, (D) water, and (E) an anionic component selected from anionic surfactants and anionic polymers; and the anionic component (E) is added in an amount, relative to the cationic direct dye (B), to satisfy the following equation: [Ion activity concentration of the anionic component/ion activity concentration of the cationic direct dye  $\leq 8$ ] (Ion activity concentration = molar

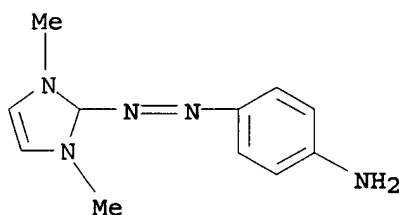
concentration x ionic valence). Since the anionic component does not disturb the dyeing of the hair with the cationic direct dye, this hair dye composition exhibits excellent dyeing power. Thus, a formulation contained an orange dye 0.6, 28% aqueous NH<sub>3</sub> 5, monoethanolamine 2, oleyl alc. 5, oleic acid 3, PEG oleocetyl ether 7, PEG lauryl ether 8, Mergital BL-309 22, Merquat-100 7.5, tetrasodium EDTA 0.1, perfume qs, and water to 100%. The second part of the formulation contained 35% aqueous H<sub>2</sub>O<sub>2</sub> 17.1, and water to 100%.

IT 97404-02-9

(hair dye compns. containing cationic  
direct dye and surfactants)

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride  
(9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 112-03-8, Stearyltrimethylammonium chloride 151-21-3, Sodium lauryl sulfate, biological studies 9002-92-0, Polyethylene glycol lauryl ether 9004-95-9, Polyethylene glycol cetyl ether 25322-68-3D, Polyethylene glycol, oleocetyl ether 26062-79-3, Merquat 100 26183-52-8, Polyethylene glycol decyl ether 68391-30-0, Basic red 76 68912-02-7 97404-02-9

(hair dye compns. containing cationic  
direct dye and surfactants)

L26 ANSWER 34 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:747120 HCAPLUS

DOCUMENT NUMBER: 135:293688

TITLE: Hair dye compositions containing direct dyes  
INVENTOR(S): Miyabe, Hajime; Matsunaga, Kenichi; Ohashi, Yukihiro; Totoki, Shintaro

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

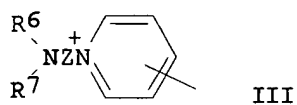
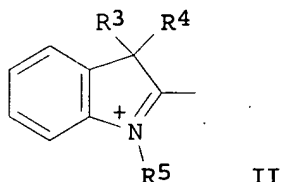
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1142559	A2	20011010	EP 2001-107829	
				2001 0406
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EP 1142559	A3	20021016		
EP 1142559	B1	20050824		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001288057	A2	20011016	JP 2000-107186	
				2000 0407
			<--	
US 2001052157	A1	20011220	US 2001-825954	
				2001 0405
			<--	
US 6648924	B2	20031118		
US 2003208856	A1	20031113	US 2003-410309	
				2003 0410
			<--	
US 6746493	B2	20040608		
PRIORITY APPLN. INFO.:			JP 2000-107186	A
				2000 0407
			<--	
			US 2001-825954	A1
				2001 0405
			<--	
OTHER SOURCE(S):		MARPAT 135:293688		
GI				



AB Provided is a hair dye composition comprising a direct dye: A-CR1 = N-NR2-B X- [wherein, A represents a group II or III: (in which, R3, R4 and R5 each independently represents a (substituted) C1-6 alkyl group, ring C may have a substituent or may be cyclocondensed with an aromatic ring, R6 and R7 each independently represents a (substituted) C1-6 alkyl group, or may be coupled to form a heterocycle together with the adjacent nitrogen atom, Z represents a (substituted) C1-4 divalent linear hydrocarbon group and ring D may be cyclocondensed with an aromatic ring), B represents a (substituted) aromatic group, R1 represents H or a (substituted) C1-6 alkyl group, R2 represents H or a (substituted) C1-6 alkyl group or a (substituted) aromatic group or may form a heterocycle together with the C atom of the aromatic ring B, and X- represents an anion]. This hair dye composition has markedly strong hair dyeing power and less color fade over time, and undergoes a smaller change in color tone of the dye even after storage. A hair dye

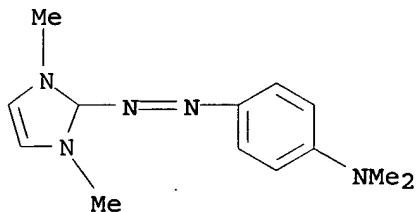
composition contained 3,3-trimethylindolium derivative 0.2, guar gum 1, Gufquat-734 1, monoethanolamine 0.1, phosphoric acid, fragrance, and water q.s. 100%.

IT 77061-58-6

(hair dye compns. containing direct dyes)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 77061-58-6 78568-96-4 83949-75-1 364764-06-7

(hair dye compns. containing direct dyes)

L26 ANSWER 35 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:712768 HCAPLUS

DOCUMENT NUMBER: 135:247011

TITLE: hair dyeing compositions containing biopolymers and oligoglycosides

INVENTOR(S): Corbella, Alberto; Guidotti, Giovanni

PATENT ASSIGNEE(S): Cognis Deutschland GmbH, Germany

SOURCE: Ger. Offen., 12 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10014340	A1	20010927	DE 2000-10014340	2000 0324
WO 2001072270	A1	20011004	WO 2001-EP2937	2001 0315

W: JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

EP 1265587 A1 20021218 EP 2001-915346

2001  
0315

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT, IE, FI, CY, TR

JP 2003528126 T2 20030924 JP 2001-570232

2001  
0315

US 2003145393 A1 20030807 US 2002-221959

2002  
0918

PRIORITY APPLN. INFO.:

DE 2000-10014340 A

2000  
0324

WO 2001-EP2937 W

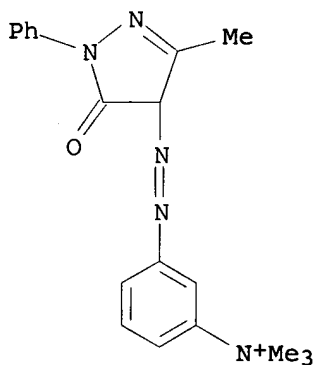
2001  
0315

AB Hair dyeing compns. with good hair-maintenance characteristics  
comprise cationic biopolymers, alkyl and/or alkenyl  
oligoglycosides and dyes. Thus, a composition contained Hydagen HCMF  
0.5, glycolic acid 0.28, Dehyquart A 1.0, Plantacare-2000 1,  
Standamox PL 0.3, hydrolyzed wheat proteins 0.5, Arianor Straw  
Yellow 0.2, preservative qs and water to 100%.

IT 68391-31-1, Arianor Straw Yellow  
(hair dyeing compns. containing  
biopolymers and oligoglycosides)

RN 68391-31-1 HCAPLUS

CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-  
4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

IC ICM A61K007-13

ICS C08L005-08; C07H015-04; C08B037-08

CC 62-3 (Essential Oils and Cosmetics)

IT 112-02-7, Dehyquart A 9004-62-0, Tylose H 100000 9012-76-4,

Chitosan 9012-76-4D, Chitosan, derivs. 68391-30-0, Arianor  
 Madder Red 68391-31-1, Arianor Straw Yellow  
 212956-67-7, Plantacare 1200 213190-84-2, Plantacare 2000  
 267895-18-1, Dehyquart C4046  
 (hair dyeing compns. containing  
 biopolymers and oligoglycosides)

L26 ANSWER 36 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:691725 HCAPLUS

DOCUMENT NUMBER: 135:247006

TITLE: Hair dye composition comprising a direct dye

INVENTOR(S): Matsunaga, Kenichi; Miyabe, Hajime; Ohashi,  
 Yukihiro; Totoki, Shintaro; Saito, Yoshinori

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1133978	A2	20010919	EP 2001-106358	2001 0316
EP 1133978	A3	20020327		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6547834	B1	20030415	US 2001-808354	2001 0315
JP 2002080332	A2	20020319	JP 2001-76599	2001 0316
PRIORITY APPLN. INFO.:			JP 2000-76636	A 2000 0317
			JP 2000-193185	A 2000 0627

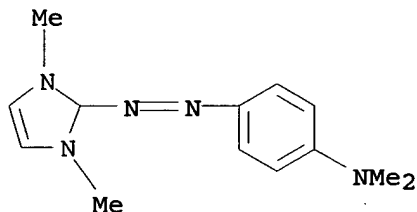
OTHER SOURCE(S): MARPAT 135:247006

AB Provide is a hair dye composition containing a direct dye (Markush structures given). This hair dye composition has markedly high hair dyeing power, has less color fade over time and undergoes a smaller change in the color tone of the dye after storage. A hair dye composition contained diemthoxyanilnylethenyltrimethylindolium chloride 0.5, monoethanolamine 1, ethanol 15, propylene glycol 10, polyoxyethylene octyldodecyl ether 10, polyoxyethylene (9) tridecyl ether 3, polyoxyethylene (3) tridecyl ether 6, diethanolamide oleate 8, oleyl alc. 2, ammonium chloride q.s., and water q.s. 100%, pH = 9.

IT 77061-58-6

(hair dye composition comprising

direct dye)  
 RN 77061-58-6 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13  
 CC 62-3 (Essential Oils and **Cosmetics**)  
 IT 2871-01-4, hc red 3 4208-80-4 6359-44-0 6359-50-8  
 6441-84-5 12217-48-0 25717-55-9 68391-30-0, basic red 76  
**77061-58-6** 93940-65-9 170109-69-0 317342-12-4  
 360777-02-2 360777-04-4 360777-05-5  
 (hair dye composition comprising  
 direct dye)

L26 ANSWER 37 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2001:691724 HCAPLUS  
 DOCUMENT NUMBER: 135:247005  
 TITLE: Hair dye composition containing a direct dye  
 INVENTOR(S): Matsunaga, Kenichi; Miyabe, Hajime; Ohashi,  
 Yukihiro  
 PATENT ASSIGNEE(S): Kao Corporation, Japan  
 SOURCE: Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: **Patent**  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1133977	A2	20010919	EP 2001-106328	2001 0315
<--				
EP 1133977	A3	20040303		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001261536	A2	20010926	JP 2000-76667	2000 0317
<--				
US 2001054206	A1	20011227	US 2001-809077	2001

0316

&lt;--

US 6592630  
PRIORITY APPLN. INFO.:

B2 20030715

JP 2000-76667

A

2000  
0317

&lt;--

OTHER SOURCE(S): MARPAT 135:247005

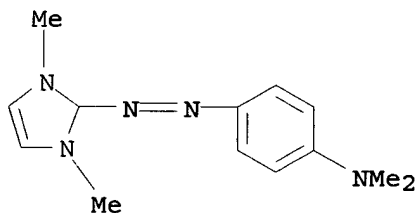
AB Provide is a hair dye composition containing a direct dye (Markush structures given). This hair dye composition has markedly high hair dyeing power, has less color fade over time and undergoes a smaller change in the color tone of the dye after storage. A hair dye composition contained Basic Yellow-2 0.5, ethanol 5, hydroxypropyl guar gum 1, Catinal LC-100 1, monoethanolamine 0.1, phosphoric acid, perfume, and water q.s. 100%, pH = 9.

IT 77061-58-6

(hair dye composition containing direct dye)

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 492-80-8 2580-56-5, Basic blue 26 66583-42-4 68123-13-7,  
Basic blue 99 77061-58-6 126772-86-9 360768-45-2

(hair dye composition containing direct dye)

L26 ANSWER 38 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:691723 HCAPLUS

DOCUMENT NUMBER: 135:247004

TITLE: Hair dye compositions containing  
1,2,4-triazolium derivativesINVENTOR(S): Matsunaga, Kenichi; Miyabe, Hajime; Ohashi,  
Yukihiro

PATENT ASSIGNEE(S): Kao Corporation, Japan

SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1133976	A2	20010919	EP 2001-106327	2001 0315
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EP 1133976	A3	20031112		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001261535	A2	20010926	JP 2000-76666	2000 0317
<--				
US 2001044975	A1	20011129	US 2001-809196	2001 0316
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PRIORITY APPLN. INFO.:			JP 2000-76666	A 2000 0317
<--				

OTHER SOURCE(S): MARPAT 135:247004

AB Provide is a hair dye composition containing a direct 1,2,4-triazolium derivs. dye (Markush structures given). This hair dye composition has markedly high hair dyeing power, has less color fade over time and undergoes a smaller change in the color tone of the dye after storage. A hair dye composition contained Basic Blue 93 0.2, guar gum 1, Gafquat 734 1, monoethanolamine 0.1, phosphoric acid, perfume, and water q.s. 100%, pH = 9.

IT 85392-69-4

(as C.I. Basic Blue 117; hair dye  
compns. containing 1,2,4-triazolium derivs.)

RN 85392-69-4 HCAPLUS

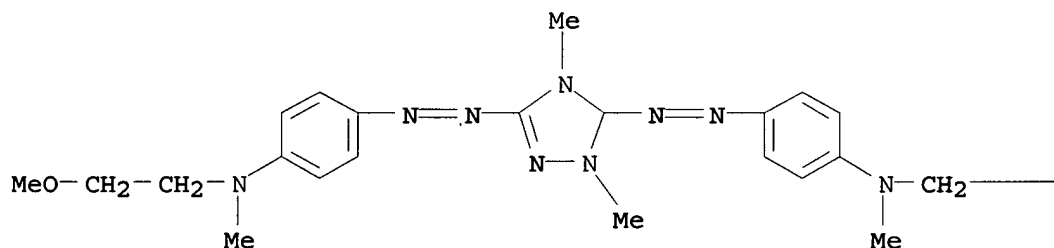
CN 1H-1,2,4-Triazolium, 3,5-bis[[4-[(2-methoxyethyl)methylamino]phenyl]azo]-1,4-dimethyl-, (T-4)-tetrachlorozincate(2-) (2:1) (9CI)  
(CA INDEX NAME)

CM 1

CRN 85392-68-3

CMF C24 H34 N9 O2

PAGE 1-A



PAGE 1-B

—CH<sub>2</sub>—OMe

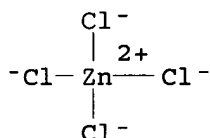
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5

CMF Cl4 Zn

CCI CCS

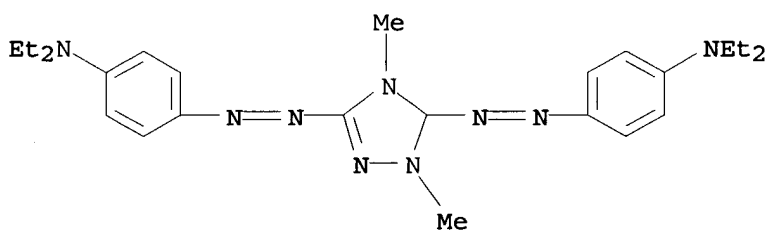


IT 361145-39-3

(as C.I. Basic Blue 93; **hair dye**  
**compns.** containing triazolium derivs.)

RN 361145-39-3 HCAPLUS

CN 1H-1,2,4-Triazolium, 3,5-bis[[4-(diethylamino)phenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and **Cosmetics**)

IT 85392-69-4

(as C.I. Basic Blue 117; **hair dye**  
**compns.** containing 1,2,4-triazolium derivs.)

IT 361145-39-3

(as C.I. Basic Blue 93; **hair dye**  
**compns.** containing triazolium derivs.)

L26 ANSWER 39 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN



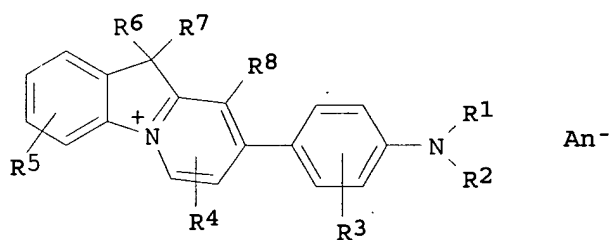
ACCESSION NUMBER: 2001:691722 HCAPLUS  
 DOCUMENT NUMBER: 135:261999  
 TITLE: Hair dye composition  
 INVENTOR(S): Ohashi, Yukihiro; Miyabe, Hajime; Matsunaga,  
 Kenichi; Totoki, Shintaro; Saito, Yoshinori  
 PATENT ASSIGNEE(S): Kao Corporation, Japan  
 SOURCE: Eur. Pat. Appl., 113 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1133975	A2	20010919	EP 2001-106318	2001 0315
EP 1133975	A3	20040317		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001261534	A2	20010926	JP 2000-76638	2000 0317
JP 2001288055	A2	20011016	JP 2000-107180	2000 0407
JP 2001288056	A2	20011016	JP 2000-107188	2000 0407
JP 2001288058	A2	20011016	JP 2000-107189	2000 0407
JP 2001288059	A2	20011016	JP 2000-107190	2000 0407
JP 2001328925	A2	20011127	JP 2000-107178	2000 0407
JP 2001328929	A2	20011127	JP 2000-107187	2000 0407
JP 2001328930	A2	20011127	JP 2000-193184	2000 0627
JP 2002012524	A2	20020115	JP 2000-193177	2000 0627
JP 2002012525	A2	20020115	JP 2000-193178	

				2000 0627
JP 2002012532	A2	20020115	JP 2000-193180	
				2000 0627
JP 2002012529	A2	20020115	JP 2000-193181	
				2000 0627
JP 2002012527	A2	20020115	JP 2000-193188	
				2000 0627
PRIORITY APPLN. INFO.:			JP 2000-76009	A 2000 0317
			JP 2000-76637	A 2000 0317
			JP 2000-76638	A 2000 0317
			JP 2000-76668	A 2000 0317
			JP 2000-107178	A 2000 0407
			JP 2000-107180	A 2000 0407
			JP 2000-107187	A 2000 0407
			JP 2000-107188	A 2000 0407
			JP 2000-107189	A 2000 0407
			JP 2000-107190	A 2000 0407
			JP 2000-193177	A 2000 0627
			JP 2000-193178	A

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0627  
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0627  
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 JP 2000-193184 A  
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0627  
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 JP 2000-193188 A  
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0627  
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OTHER SOURCE(S): MARPAT 135:261999  
 GI



AB A hair dye composition comprises a direct dye compound (I, R1,R2 = e.g., H, lower alkyl or aralkyl, R3,R5 = H, halo, lower alkyl or alkoxy, R4 = lower alkyl or (substituted) Ph, R6,R7 = lower alkyl, R8 = H, Me, or cyano and A- = anion). I have markedly hair dyeing power, less color fade over time and do not undergo a change in the color shade of the dye even after storage. Thus, a formulation contained dye 0.2, guar gum 1, Gasquat-734 1, monoethanolamine 0.1, H3PO4 to pH 9, perfume qs, and water to 100 g.

IT 35894-58-7 62608-17-7 77061-58-6  
 86565-98-2 361175-81-7 361193-84-2  
 361193-86-4

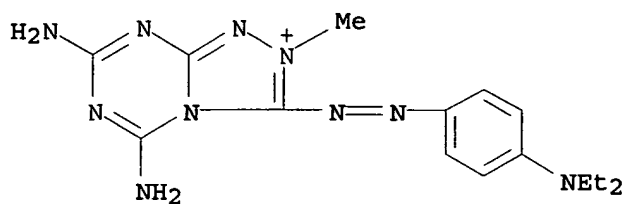
(hair dye composition)

RN 35894-58-7 HCAPLUS

CN 1,2,4-Triazolo[4,3-a][1,3,5]triazinium, 5,7-diamino-3-[[4-(diethylamino)phenyl]azo]-2-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 50565-99-6  
 CMF C15 H21 N10



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

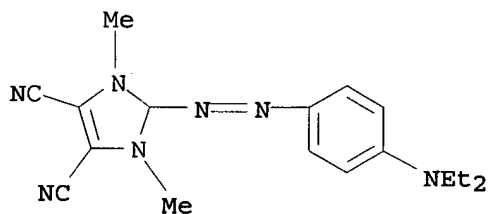
RN 62608-17-7 HCAPLUS

CN 1H-Imidazolium, 4,5-dicyano-2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, (T-4)-tetrachlorozincate(2-) (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 62608-16-6

CMF C17 H20 N7



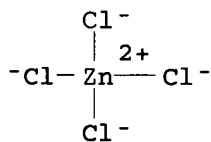
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5

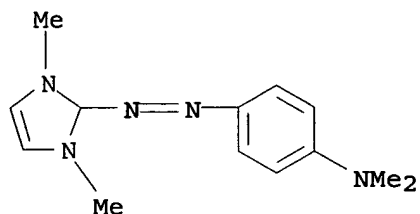
CMF C14 Zn

CCI CCS



RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 86565-98-2 HCAPLUS

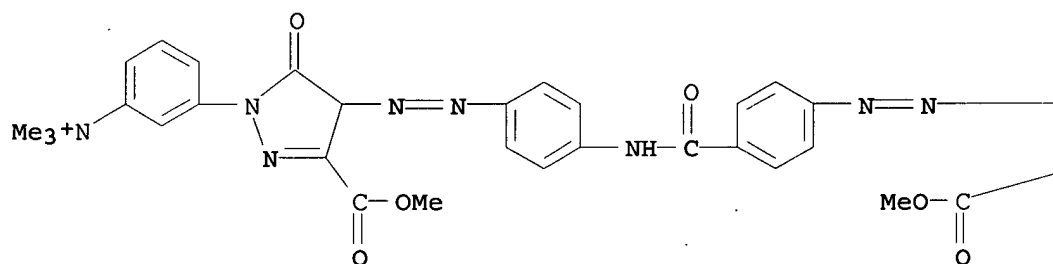
CN Benzenaminium, 3-[4,5-dihydro-5-[[4-[[4-[[4,5-dihydro-3-(methoxycarbonyl)-5-oxo-1-[3-(trimethylammonio)phenyl]-1H-pyrazol-4-yl]azo]benzoyl]amino]phenyl]azo]-3-(methoxycarbonyl)-5-oxo-1H-pyrazol-1-yl]-N,N,N-trimethyl-, acetate chloride (9CI) (CA INDEX NAME)

CM 1

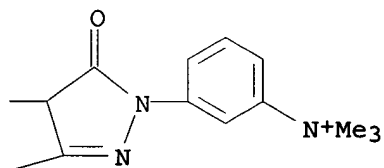
CRN 86565-97-1

CMF C41 H43 N11 O7

PAGE 1-A



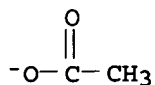
PAGE 1-B



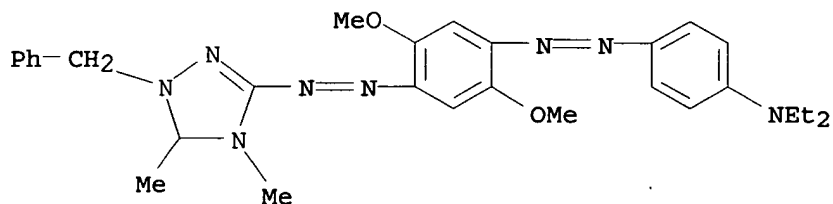
CM 2

CRN 71-50-1

CMF C2 H3 O2



RN 361175-81-7 HCAPLUS  
 CN 1H-1,2,4-Triazolium, 3-[[4-[[4-(diethylamino)phenyl]azo]-2,5-dimethoxyphenyl]azo]-4,5-dimethyl-1-(phenylmethyl)-, chloride (9CI) (CA INDEX NAME)

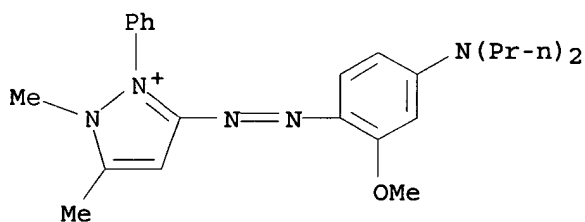


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 361193-84-2 HCAPLUS  
 CN 1H-Pyrazolium, 3-[[4-(dipropylamino)-2-methoxyphenyl]azo]-1,5-dimethyl-2-phenyl-, (T-4)-tetrachlorozincate(2-) (2:1) (9CI) (CA INDEX NAME)

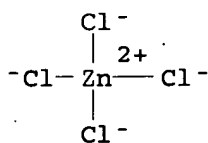
CM 1

CRN 361193-83-1  
 CMF C24 H32 N5 O



CM 2

CRN 15201-05-5  
 CMF Cl4 Zn  
 CCI CCS



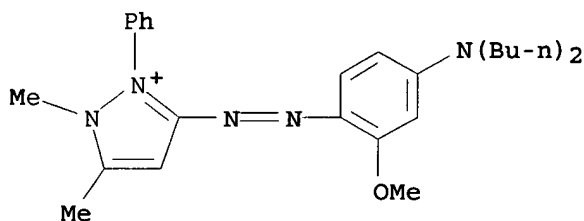
RN 361193-86-4 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dibutylamino)-2-methoxyphenyl]azo]-1,5-dimethyl-2-phenyl-, (T-4)-tetrachlorozincate(2-) (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 361193-85-3

CMF C26 H36 N5 O

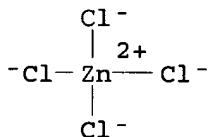


CM 2

CRN 15201-05-5

CMF Cl4 Zn

CCI CCS



IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 41

IT 35894-58-7 62608-17-7 67162-09-8 70173-83-0  
 70173-85-2 71494-86-5 71494-88-7 77061-58-6  
 77544-83-3 82494-03-9 86565-98-2 88044-67-1  
 90441-28-4 93940-65-9 105292-24-8 105292-39-5 105292-41-9  
 105292-48-6 119402-93-6 120181-94-4 120181-96-6  
 123405-43-6 125282-76-0 137014-75-6 137014-77-8  
 137656-78-1 138001-72-6 138001-75-9 138001-82-8  
 163661-77-6 178252-56-7 178252-59-0 178252-61-4  
 186770-76-3 186770-79-6 186770-81-0 186771-05-1  
 361175-75-9 361175-76-0 361175-77-1 361175-78-2  
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 361175-83-9 361175-84-0 361175-85-1 361175-87-3  
 361175-89-5 361175-90-8 361175-92-0 361175-94-2

361175-96-4 361175-97-5 361175-98-6 361176-00-3  
 361176-01-4 361176-02-5 361176-04-7 361176-05-8  
 361176-07-0 361176-08-1 361176-09-2 361176-10-5  
 361176-11-6 361176-12-7 361193-84-2  
 361193-86-4 361341-86-8 361341-88-0  
 (hair dye composition)

L26 ANSWER 40 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:873293 HCAPLUS

DOCUMENT NUMBER: 134:46621

TITLE: Acid hair dye compositions for applying wet hair

INVENTOR(S): Iwamoto, Yoshimichi; Goto, Kumiko; Asama, Mamiko

PATENT ASSIGNEE(S): Kanebo, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000344639	A2	20001212	JP 2000-59993	2000 0306

PRIORITY APPLN. INFO.: <-- JP 1999-83349 A 1999  
0326

OTHER SOURCE(S): MARPAT 134:46621

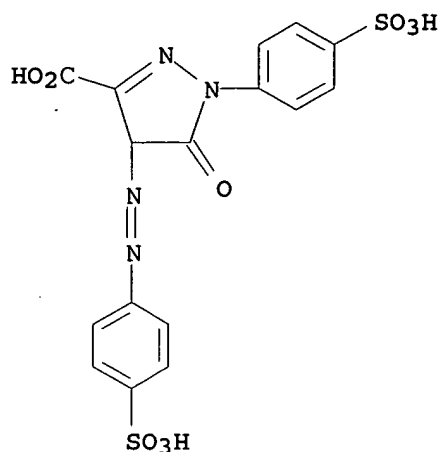
AB The invention relates to an acid hair dye composition for use by applying the composition to wet hair, containing (1) a dye auxiliary selected from a group consisting of aromatic alcs., e.g. benzyl alc., 2-benzyloxy ethanol, phenethyl alc., phenoxy ethanol, etc., and n-butanol, (2) acid dye, and (3) water, and having a pH of 2-4.5, wherein unwanted skin dyeing caused by the acid hair dye composition is minimized. An acid hair dye composition containing benzyl alc. 8, hydroxyethyl cellulose 1.5, ethanol 23, glycolic acid 6, ammonium glycolate 0.6, octyl glucoside 1, Japan black 401 0.1, Japan purple 401 0.15, Japan orange 205, and water q.s. to 100 % was prepared

IT 1934-21-0, Japan yellow 4  
(acid hair dye compns. containing aromatic alcs. or n-butanol as dye auxiliaries for applying wet hair)

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)





●3 Na

IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 60-12-8, Phenethyl alcohol 71-36-3, n-Butanol, biological studies 100-51-6, Benzenemethanol, biological studies 122-99-6, Phenoxyethanol 622-08-2, 2-Benzyloxyethanol 633-96-5, Japan orange 205 846-70-8, Japan yellow 403-1 1064-48-8, Japan black 401 1934-21-0, Japan yellow 4 3520-42-1, Japan red 106 3567-66-6, Japan red 227 4430-18-6, Japan purple 401 4548-53-2, Japan red 504  
 (acid hair dye compns. containing aromatic alcs. or n-butanol as dye auxiliaries for applying wet hair)

L26 ANSWER 41 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:547325 HCAPLUS

DOCUMENT NUMBER: 133:155131

TITLE: Oxidative hair dye composition containing green tea polyphenols

INVENTOR(S): Matravers, Peter; Milius, Ulrich; Cornuelle, Tracy L.

PATENT ASSIGNEE(S): Aveda Corporation, USA

SOURCE: U.S., 5 pp.  
 CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6099591	A	20000808	US 1998-15461	1998 0129

PRIORITY APPLN. INFO.:

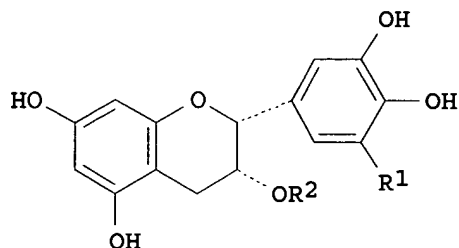
US 1998-15461

1998

0129

&lt;--

OTHER SOURCE(S) : MARPAT 133:155131  
GI

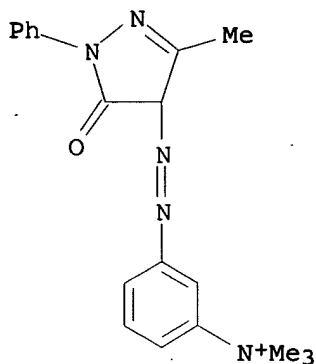


AB A hair coloring composition, and a method for using the composition in which a natural plant-derived chemical of the formula I is employed as a coupler-modifier in a composition containing a primary intermediate and a customary coupler. The novel coupler-modifiers produce a composition which is more physiol. suitable for use in hair colorings than the prior art compns. and allows for the preparation of compns. which produce highly stable colorings over a broad range shades and tones. A hair coloring solution contained green tea polyphenols 1.0, p-aminophenol 1.6, resorcinol 1.6, 50% sodium hydroxide 1.2, anhydrous sodium sulfite 0.4, ammonium lauryl sulfate (28% aqueous solution) 10.0, ethanol 10.0, 26% ammonia 10.0 and water 64.2 g. Shortly before application 10 g of this hair coloring composition is mixed with 10 mL hydrogen peroxide solution (6%), and the mixture is allowed to react for 30 min at 30° in blond human hair. The hair is then rinsed with water and dried to obtain a light olive coloration.

IT 68391-31-1  
(oxidative hair dye composition containing green tea polyphenols)

RN 68391-31-1 HCAPLUS

CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

IC ICM A61K007-13  
 INCL 008408000  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 95-70-5, 2,5-Diaminotoluene 106-50-3, 1,4-Diaminobenzene,  
 biological studies 116-85-8, DISPERSE RED 15 123-30-8,  
 p-Aminophenol 128-95-0, 1,4-Diamino-anthraquinone. 490-46-0,  
 Epicatechin. 863-03-6, Epicatechin gallate 970-74-1,  
 Epigallocatechin 989-51-5, Epigallocatechin gallate 2475-45-8,  
 1,4,5,8-Tetraaminoanthraquinone 2835-95-2, 5-Amino-2-  
 methylphenol 2835-99-6, 3-Methyl-4-amino-phenol 5307-14-2,  
 2-Nitro 1,4-diaminobenzene 7722-84-1, Hydrogen peroxide,  
 biological studies 26381-41-9 68123-13-7, C.I. 56059  
 68391-30-0 68391-31-1 73793-80-3, 2,5-Diaminobenzyl  
 alcohol

(oxidative hair dye composition containing  
 green tea polyphenols)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 42 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2000:529432 HCAPLUS  
 DOCUMENT NUMBER: 133:155126  
 TITLE: Cationic dye compositions for keratin dyeing,  
 and method and kit therefor  
 INVENTOR(S): Rondeau, Christine  
 PATENT ASSIGNEE(S): L'oreal S. A., Fr.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000212052	A2	20000802	JP 2000-11040	2000

0119

FR 2788432 A1 20000721 FR 1999-501

1999  
0119

FR 2788432 B1 20030404  
EP 1025834 A1 20000809 EP 1999-403290

1999  
1227

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
MC, PT, IE, SI, LT, LV, FI, RO  
AU 726530 B2 20001109 AU 2000-10129

2000  
0106

CN 1265307 A 20000906 CN 2000-101132

2000  
0118

KR 2000057768 A 20000925 KR 2000-2237

2000  
0118

BR 2000000740 A 20010502 BR 2000-740

2000  
0118

RU 2200537 C2 20030320 RU 2000-101579

2000  
0118

ZA 2000000213 A 20000719 ZA 2000-213

2000  
0119

US 6432146 B1 20020813 US 2000-487665

2000  
0119

PRIORITY APPLN. INFO.: FR 1999-501 A  
1999  
0119

OTHER SOURCE(S): MARPAT 133:155126

AB The invention relates to a cationic dye composition for use for dyeing keratin fiber, especially hair, providing long-lasting dyeing property, wherein the composition contains an arianor dye and addnl. specified cationic dye material. A hair dye composition containing Arianor madder red 0.1 and 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-1H-imidazolium chloride 0.1, hydroxyethyl cellulose 1, ethanol 10, 2-amino-2-methyl-1-propanol q.s. to pH 9, and water q.s. to 100 % was prepared

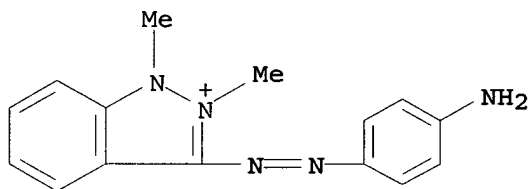
IT 6687-56-5 7267-43-8 41338-82-3  
41338-83-4 54940-81-7 62163-15-9  
68391-31-1, Basic yellow 57 73287-60-2  
73447-48-0 75655-00-4 77061-58-6  
83950-26-9 89923-52-4 97404-02-9  
109220-25-9 161328-92-3 161329-06-2

161329-07-3 161329-08-4 161329-09-5  
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 161329-40-4 161329-42-6 161329-43-7  
 161329-44-8 161329-45-9 161329-47-1  
 161329-49-3 167382-87-8 167382-88-9  
 167382-97-0 167382-98-1 167382-99-2  
 178822-03-2 178822-05-4

(keratin dye compns. containing  
 arianor dyes and addnl. cationic dye materials)

RN 6687-56-5 HCAPLUS

CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
 (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

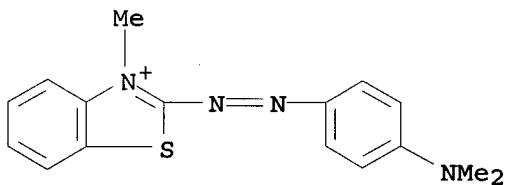
RN 7267-43-8 HCAPLUS

CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 38901-86-9

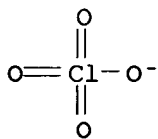
CMF C16 H17 N4 S



CM 2

CRN 14797-73-0

CMF Cl O4



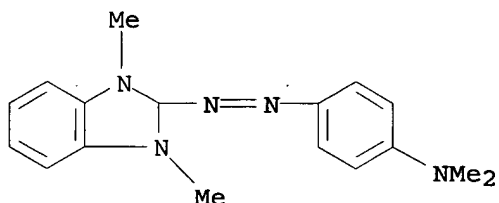
RN 41338-82-3 HCAPLUS

CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 49873-03-2

CMF C17 H20 N5

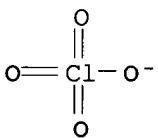


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

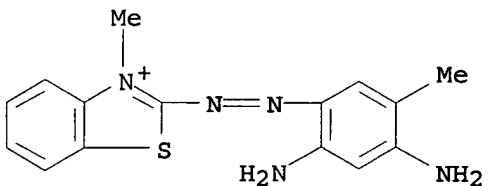
CRN 14797-73-0

CMF C1 O4



RN 41338-83-4 HCAPLUS

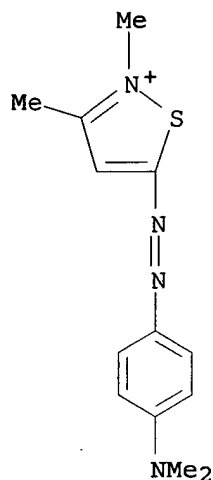
CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-, iodide (9CI) (CA INDEX NAME)



● I<sup>-</sup>

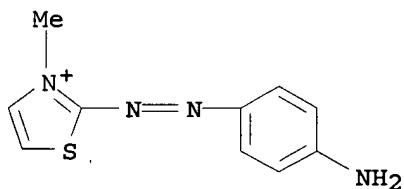
RN 54940-81-7 HCAPLUS

CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

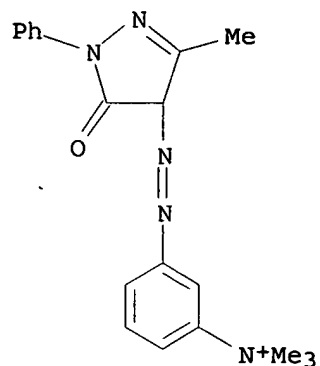
RN 62163-15-9 HCAPLUS

CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

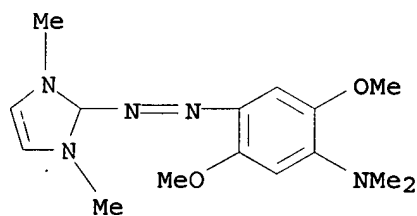
RN 68391-31-1 HCAPLUS

CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

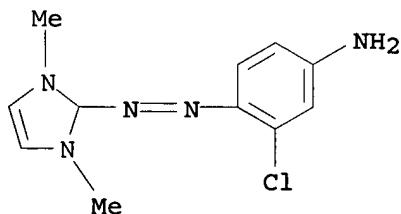
RN 73287-60-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(dimethylamino)-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 73447-48-0 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



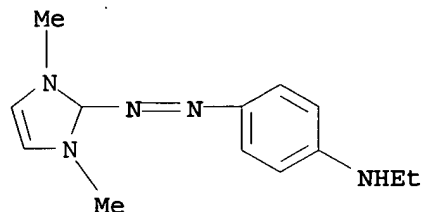
● Cl<sup>-</sup>



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

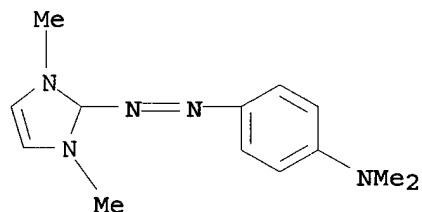


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

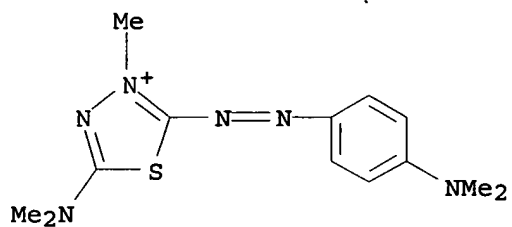
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

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CRN 81921-79-1

CMF C13 H19 N6 S



CM 2

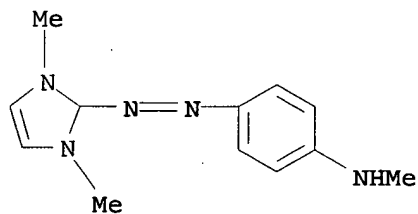
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS

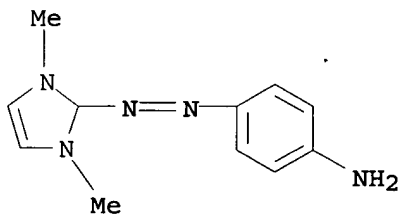
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

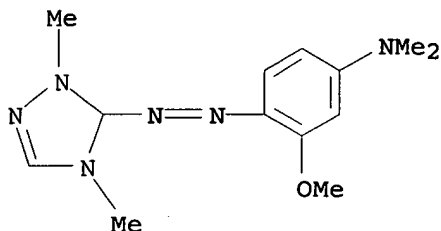
CN 1H-Imidazolium, 2-[[4-aminophenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-  
1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

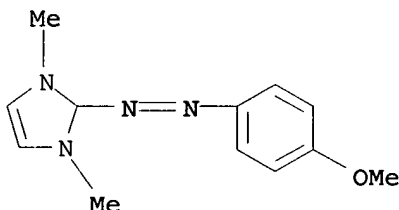


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride  
(9CI) (CA INDEX NAME)

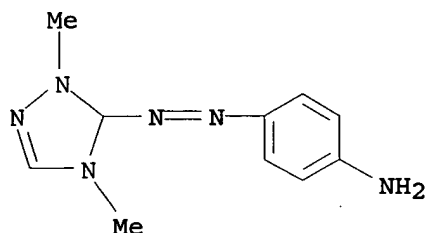


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

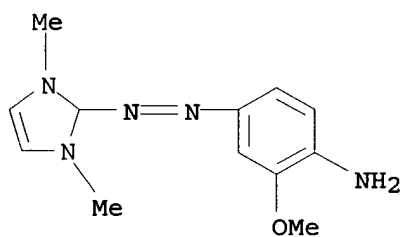


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

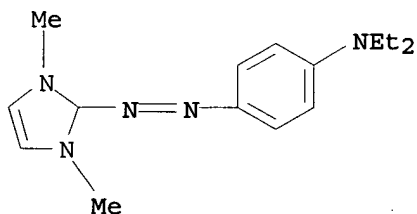


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



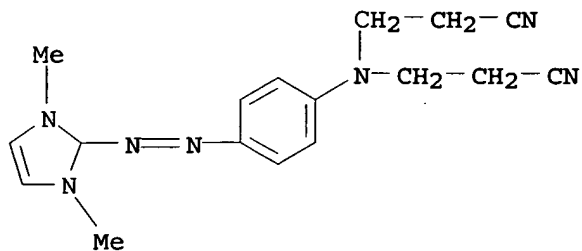
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-bis(2-cyanoethyl)amino]phenyl]azo]-1,3-

dimethyl-, chloride (9CI) (CA INDEX NAME)

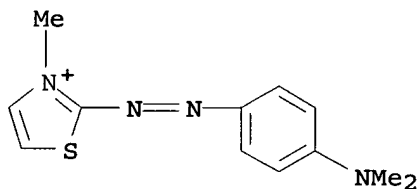


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

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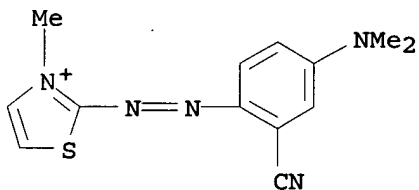
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

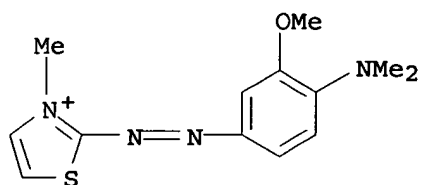
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

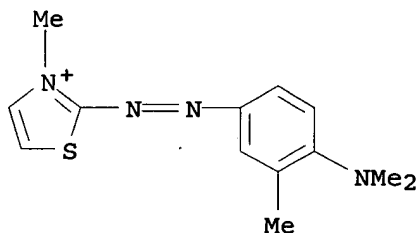
RN 161329-17-5 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



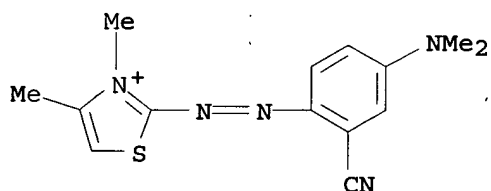
● Cl<sup>-</sup>

RN 161329-18-6 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



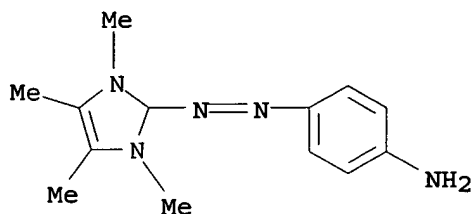
● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS  
 CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-, chloride (9CI) (CA INDEX NAME)

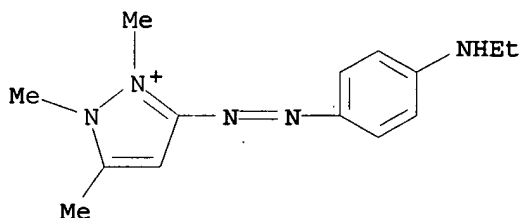


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-25-5 HCAPLUS

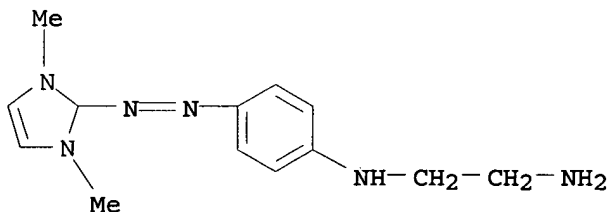
CN 1H-Pyrazolium, 3-[[4-(ethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

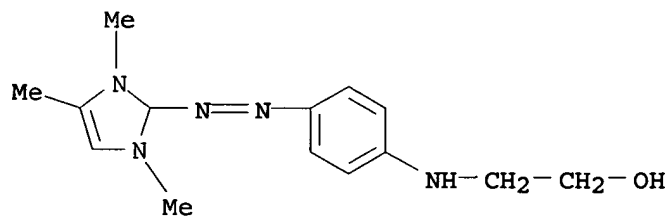


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

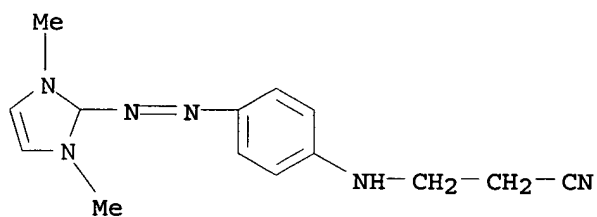


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

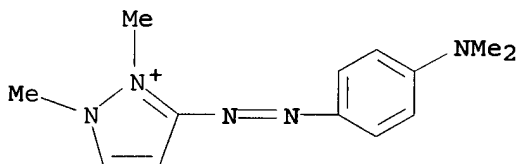


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-30-2 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)

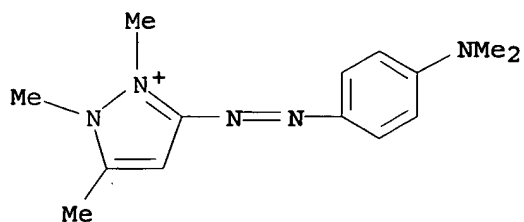


● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



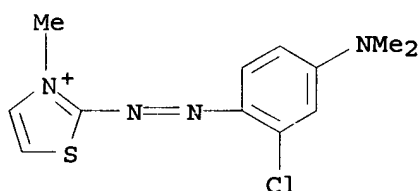


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

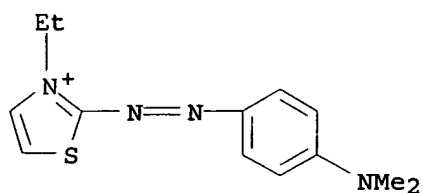
CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-37-9 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl  
 sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8  
 CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

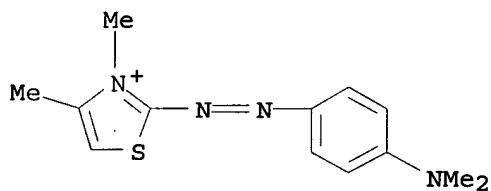
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-40-4 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S

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OTHER SOURCE(S): MARPAT 132:26624

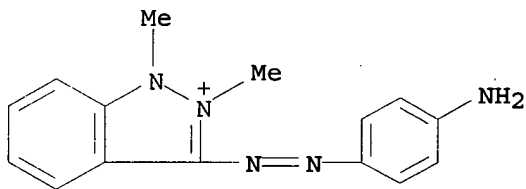
AB The title hair dye compns. are disclosed. A hair dye contained Me pyridinium N,N-dimethylbenzylidene derivative 0.09, a quaternary ammonium polymer 1.0, nonyl phenol containing 9 mols of ethylene oxide 8.0, 2-amino-2-Me propanol q.s. pH = 9, and water q.s. 100 g. The composition is applied on the hair for 30 min, then is washed with shampoo and dried to obtain a strong copper color.

IT 6687-56-5 54940-81-7 62163-15-9  
 73447-48-0 75655-00-4 77061-58-6  
 83950-26-9 89923-52-4 97404-02-9  
 109220-25-9 161328-92-3 161329-06-2  
 161329-07-3 161329-08-4 161329-09-5  
 161329-15-3 161329-16-4 161329-17-5  
 161329-18-6 161329-22-2 161329-23-3  
 161329-25-5 161329-27-7 161329-28-8  
 161329-29-9 161329-30-2 161329-31-3  
 161329-35-7 161329-37-9 161329-40-4  
 161329-42-6 161329-43-7 161329-44-8  
 161329-45-9 161329-47-1 161329-49-3  
 167382-87-8 167382-88-9 167382-97-0  
 167382-98-1 167382-99-2 178822-03-2  
 178822-05-4

(hair dye compns. comprising  
 direct cationic dye and substantive cationic or amphoteric  
 polymer)

RN 6687-56-5 HCAPLUS

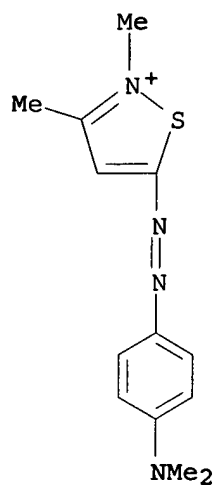
CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
 (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

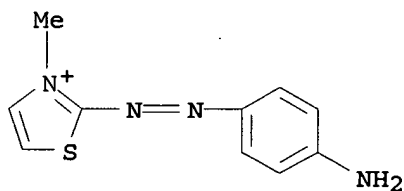
RN 54940-81-7 HCAPLUS

CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



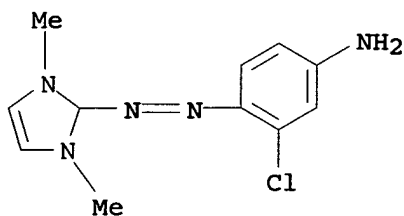
● Cl<sup>-</sup>

RN 62163-15-9 HCAPLUS  
 CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 73447-48-0 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

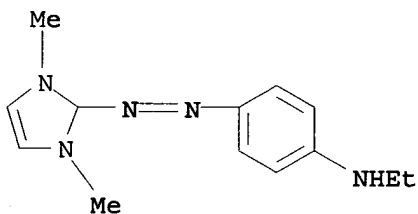


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

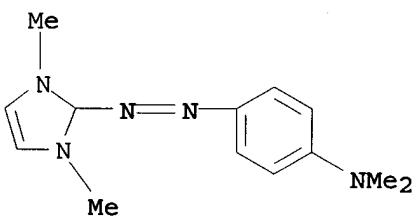


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

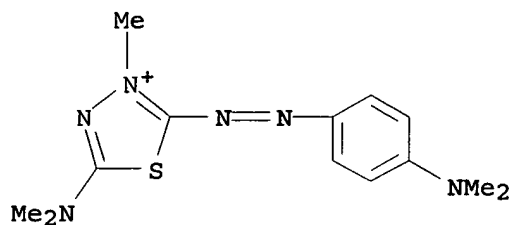
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S



CM 2

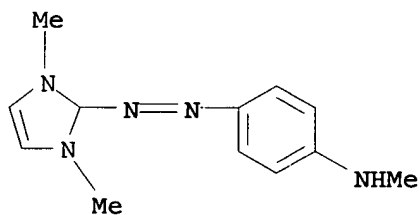
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS

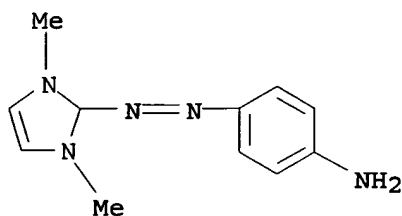
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

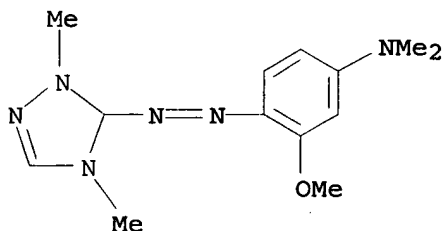


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

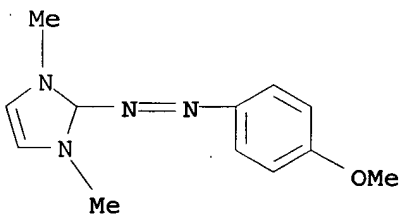


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



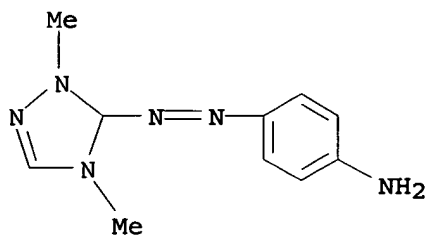
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



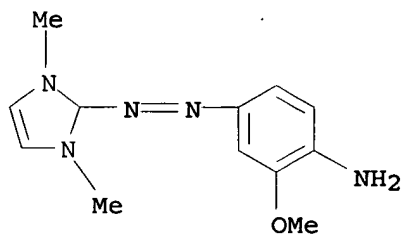


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

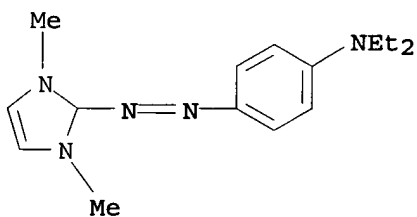


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

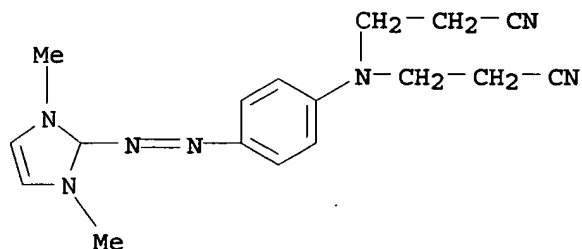


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

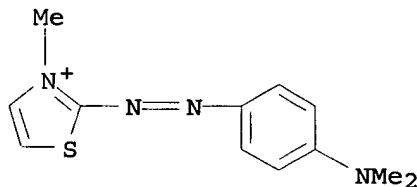


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

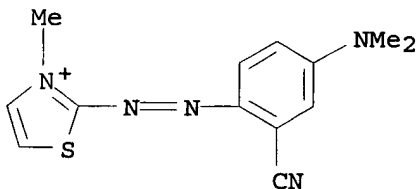
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

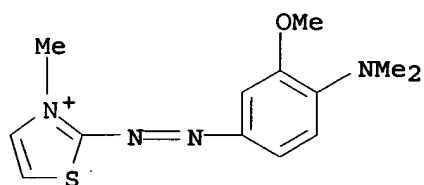
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-17-5 HCAPLUS

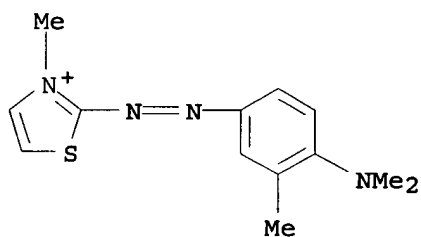
CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-18-6 HCAPLUS

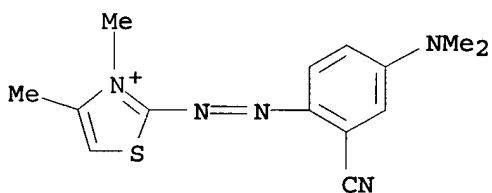
CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS

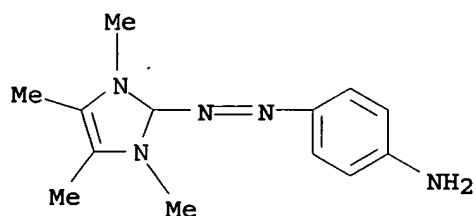
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-, chloride (9CI) (CA INDEX NAME)

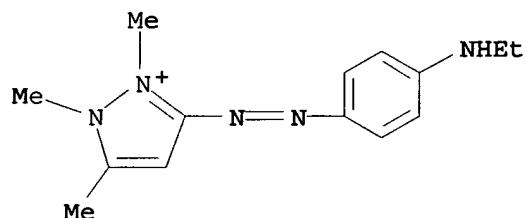


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-25-5 HCAPLUS

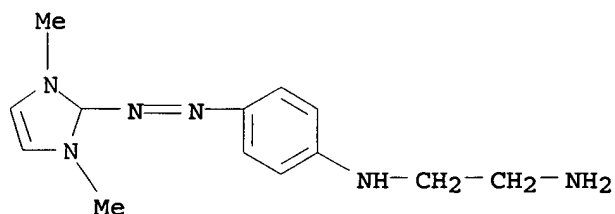
CN 1H-Pyrazolium, 3-[[4-(ethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

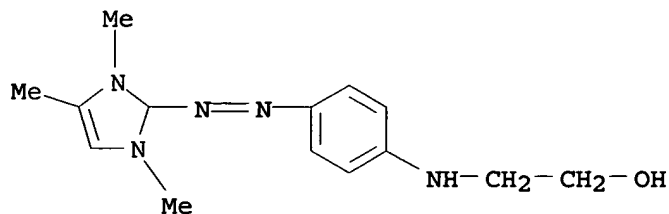


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

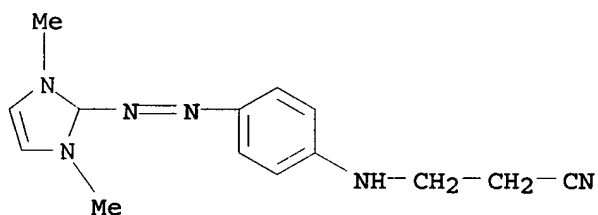


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

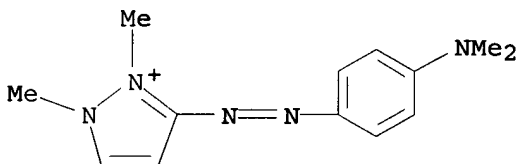


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-30-2 HCAPLUS

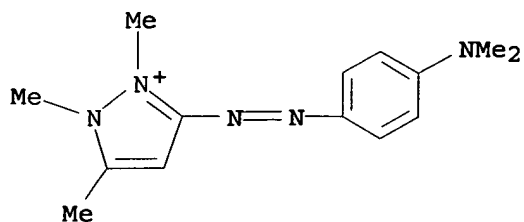
CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)

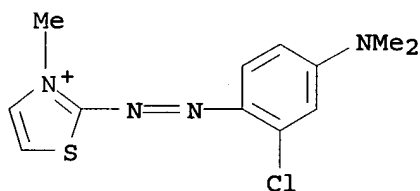


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

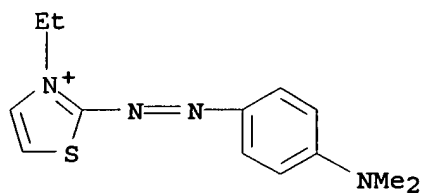
CRN 21228-90-0  
 CMF C H3 O4 S

Me<sup>-</sup> O<sup>-</sup> SO<sub>3</sub><sup>-</sup>

RN 161329-37-9 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl  
 sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8  
 CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

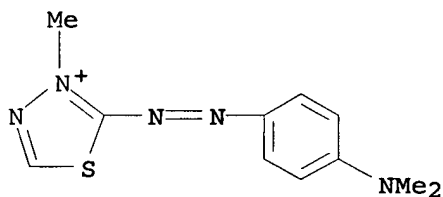
RN 161329-40-4 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

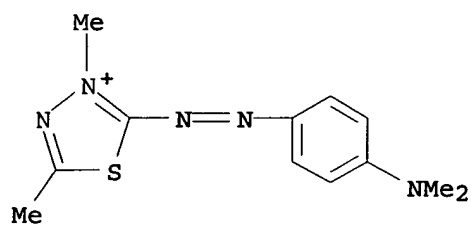
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

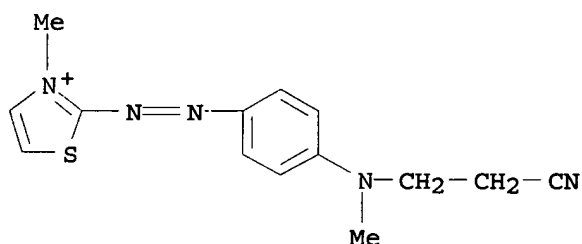
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

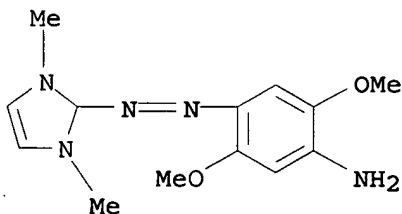
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

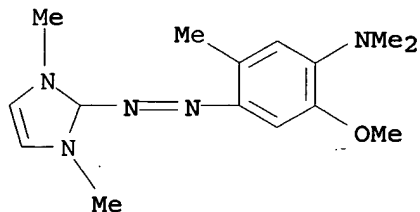
● Cl<sup>-</sup>



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

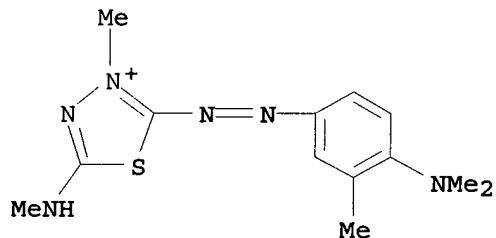
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

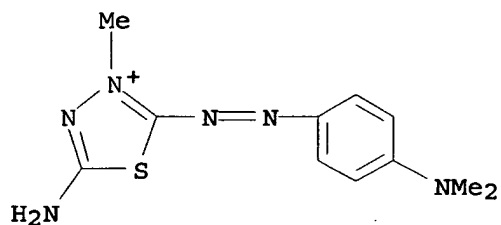
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



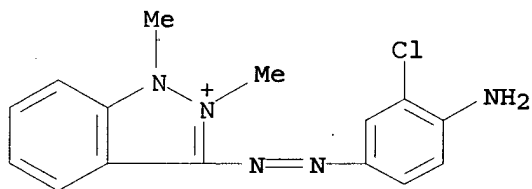
CM 2

CRN 21228-90-0

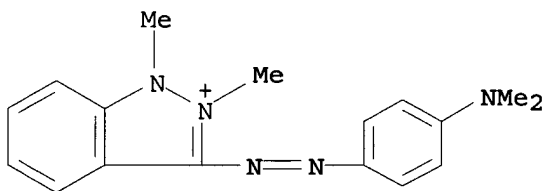
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

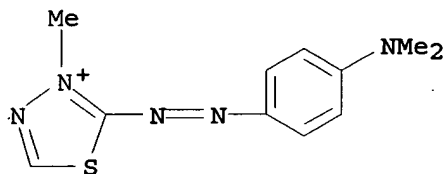
RN 167382-87-8 HCAPLUS

CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS

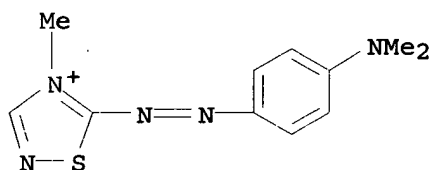
CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



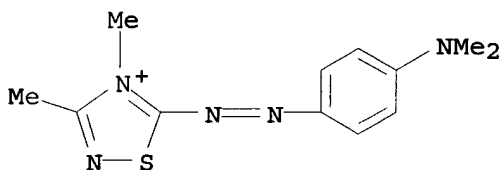
● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



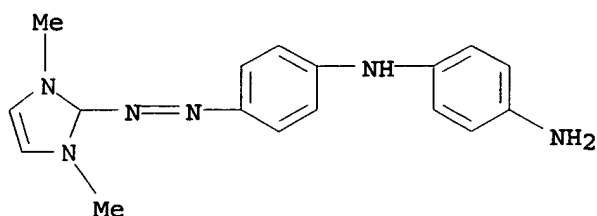
● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)

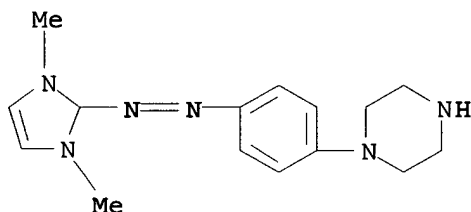


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

ICS A61K007-135

CC 62-3 (Essential Oils and Cosmetics)

IT 6687-56-5 9004-34-6, Cellulose, biological studies

26161-33-1 35429-19-7 39838-87-4 42476-20-0 53694-17-0

54940-81-7 62163-15-9 64651-39-4 68259-00-7

68912-02-7 73447-48-0 75655-00-4

77061-58-6 83950-26-9 84912-24-3

89923-52-4 92888-19-2 93940-65-9 97404-02-9

97406-09-2 109220-25-9 143084-49-5 160598-04-9

161328-83-2 161328-85-4 161328-86-5 161328-87-6

161328-89-8 161328-91-2 161328-92-3 161328-94-5

161328-95-6 161328-96-7 161328-99-0 161329-01-7

161329-02-8 161329-04-0 161329-05-1 161329-06-2

161329-07-3 161329-08-4 161329-09-5

161329-15-3 161329-16-4 161329-17-5

161329-18-6 161329-22-2 161329-23-3

161329-25-5 161329-27-7 161329-28-8

161329-29-9 161329-30-2 161329-31-3

161329-35-7 161329-37-9 161329-38-0

161329-40-4 161329-42-6 161329-43-7

161329-44-8 161329-45-9 161329-47-1

161329-49-3 167382-76-5 167382-77-6 167382-78-7

167382-79-8 167382-80-1 167382-82-3 167382-83-4

167382-87-8 167382-88-9 167382-95-8  
 167382-96-9 167382-97-0 167382-98-1  
 167382-99-2 178822-03-2 178822-05-4  
 211050-61-2 232284-18-3 251352-56-4  
 (hair dye compns. comprising  
 direct cationic dye and substantive cationic or amphoteric  
 polymer)

L26 ANSWER 53 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:783698 HCAPLUS

DOCUMENT NUMBER: 132:15474

TITLE: Hair dye compositions containing a direct  
 cationic dye and a polyol or a polyolether

INVENTOR(S): Lang, Gerard; Cotteret, Jean

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: Eur. Pat. Appl., 47 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 962220	A2	19991208	EP 1999-401100	1999 0505
EP 962220	A3	20000308		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2779056	A1	19991203	FR 1998-6752	1998 0528
FR 2779056	B1	20010907		
ZA 9903198	A	19991110	ZA 1999-3198	1999 0510
AU 9928081	A1	19991209	AU 1999-28081	1999 0512
AU 720852	B2	20000615		
MX 9904785	A	20000831	MX 1999-4785	1999 0524
BR 9901830	A	20000530	BR 1999-1830	1999 0525
CA 2273411	AA	19991128	CA 1999-2273411	1999 0527
CN 1237410	A	19991208	CN 1999-109254	1999

0527

JP 11349457 A2 19991221 JP 1999-148934

1999  
0527

US 2002004955 A1 20020117 US 1999-321889

1999  
0528

US 6371994 B2 20020416  
PRIORITY APPLN. INFO.: FR 1998-6752 A  
1998  
0528

OTHER SOURCE(S): MARPAT 132:15474

AB The title hair dye compns. are disclosed. A hair dye contained N,N-dimethyl-4-[(4-methyl)-1-oxido-2-pyridynolazo]aniline 0.12, propylene glycol monomethyl ether 10.0, 2-amino-2-Me propanol q.s. pH = 9, and water q.s. 100 g. The composition is applied on the hair for 30 min, then is rinsed and washed with a shampoo and dried to obtain a strong red color.

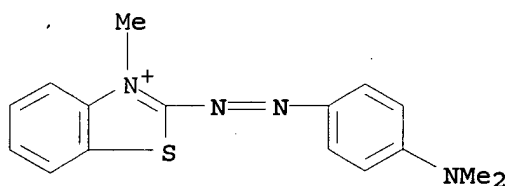
IT 7267-43-8 41338-82-3 41338-83-4  
(hair dye compns. containing direct cationic dye and polyol or polyolether)

RN 7267-43-8 HCAPLUS

CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, perchlorate (9CI) (CA INDEX NAME)

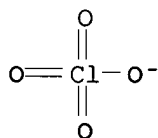
CM 1

CRN 38901-86-9  
CMF C16 H17 N4 S



CM 2

CRN 14797-73-0  
CMF Cl O4



RN 41338-82-3 HCAPLUS

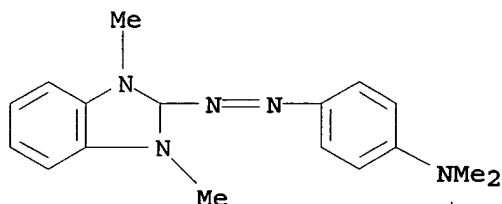
CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-

, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 49873-03-2

CMF C17 H20 N5

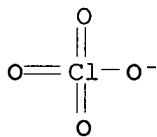


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

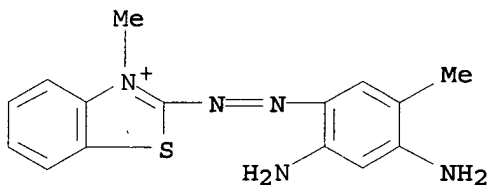
CRN 14797-73-0

CMF Cl O4



RN 41338-83-4 HCAPLUS

CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-, iodide (9CI) (CA INDEX NAME)



● I<sup>-</sup>

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 56-81-5, 1,2,3-Propanetriol, biological studies 7077-55-6

7267-43-8 7687-09-4 7687-11-8 41338-82-3

41338-83-4 41338-95-8 41338-98-1 41339-00-8

51473-40-6 51473-50-8 52132-00-0 52132-02-2 52132-03-3

52132-04-4 52132-05-5 52132-06-6 52132-11-3 52132-12-4

52132-13-5 52132-14-6 52132-15-7 52132-16-8 52132-17-9

52132-18-0 52132-19-1 52132-20-4 52132-21-5 52132-22-6

52132-23-7 52132-24-8 52132-25-9 52132-26-0 52132-27-1

52132-28-2    52132-30-6    52132-31-7    59405-36-6    59405-38-8  
 59405-42-4    59405-44-6    59405-45-7    59405-47-9    59405-48-0  
 59405-54-8    59405-55-9    59405-57-1    59405-59-3    59405-61-7  
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 59642-69-2    59642-73-8    59642-75-0    59642-77-2    59642-93-2  
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 251352-44-0    251352-45-1    251352-46-2    251352-47-3  
 251352-48-4    251352-49-5    251352-50-8    251352-55-3

(hair dye compns. containing direct  
 cationic dye and polyol or polyolether)

L26 ANSWER 54 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:783697 HCAPLUS

DOCUMENT NUMBER: 132:26629

TITLE: hair dye compositions containing a direct  
cationic dye and a polyol and/or a polyolether

INVENTOR(S): Rondeau, Christine

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: Eur. Pat. Appl., 54 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 962219	A2	19991208	EP 1999-401099	1999 0505
EP 962219	A3	20000308		
EP 962219	B1	20041006		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2779055	A1	19991203	FR 1998-6751	1998 0528
FR 2779055	B1	20010504		
AT 278378	E	20041015	AT 1999-401099	1999 0505
PT 962219	T	20050228	PT 1999-401099	1999 0505
ES 2230815	T3	20050501	ES 1999-401099	1999 0505
ZA 9903199	A	19991115	ZA 1999-3199	1999 0510
AU 9928082	A1	19991209	AU 1999-28082	1999



0512

&lt;--

AU 722600 B2 20000810  
 MX 9904753 A 20000831 MX 1999-4753

1999  
 0521

&lt;--

BR 9901829 A 20000530 BR 1999-1829

1999  
 0525

&lt;--

CA 2273416 AA 19991128 CA 1999-2273416

1999  
 0527

&lt;--

CN 1237409 A 19991208 CN 1999-109246

1999  
 0527

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RU 2166930 C2 20010520 RU 1999-111265

1999  
 0527

&lt;--

JP 11349458 A2 19991221 JP 1999-149113

1999  
 0528

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US 2002002748 A1 20020110 US 1999-321890

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US 6436153 B2 20020820  
 PRIORITY APPLN. INFO.: FR 1998-6751 A

1998  
 0528

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OTHER SOURCE(S): MARPAT 132:26629

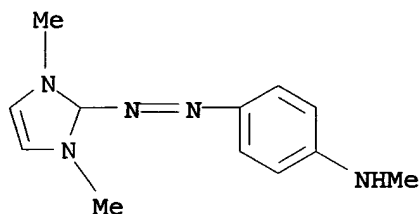
AB The title hair dye compns. are disclosed. A hair dye contained an azoaniline-containing imidazolium compound 0.2, propylene glycol 10.0, 2-amino-2-Me propanol q.s. pH = 9, and water q.s. 100 g. The composition is applied on the hair for 30 min, then is rinsed and washed with a shampoo and dried to obtain a strong orange color.

IT 89923-52-4

(hair dye compns. containing direct  
 cationic dye and polregyol and/or polyolether)

RN 89923-52-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

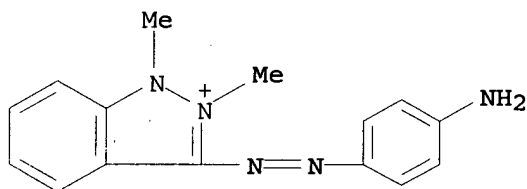
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IT 6687-56-5 54940-81-7 62163-15-9  
 73447-48-0 75655-00-4 77061-58-6  
 83950-26-9 97404-02-9 109220-25-9  
 161328-92-3 161329-06-2 161329-07-3  
 161329-08-4 161329-09-5 161329-15-3  
 161329-16-4 161329-17-5 161329-18-6  
 161329-22-2 161329-23-3 161329-25-5  
 161329-27-7 161329-28-8 161329-29-9  
 161329-30-2 161329-31-3 161329-35-7  
 161329-37-9 161329-39-1 161329-40-4  
 161329-42-6 161329-43-7 161329-44-8  
 161329-45-9 161329-47-1 161329-49-3  
 167382-87-8 167382-88-9 167382-97-0  
 167382-98-1 167382-99-2 178822-03-2  
 178822-05-4

(hair dye compns. containing direct  
 cationic dye and polyol and/or polyolether)

RN 6687-56-5 HCAPLUS

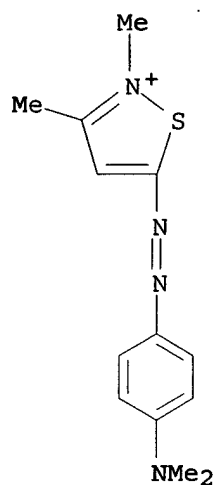
CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
 (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

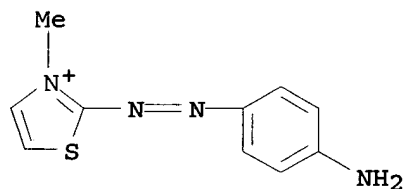
RN 54940-81-7 HCAPLUS

CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



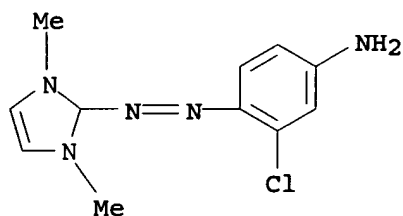
● Cl<sup>-</sup>

RN 62163-15-9 HCAPLUS  
 CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 73447-48-0 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

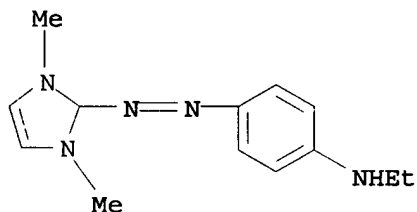


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

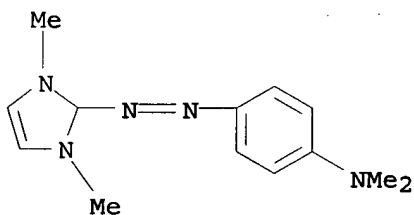


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

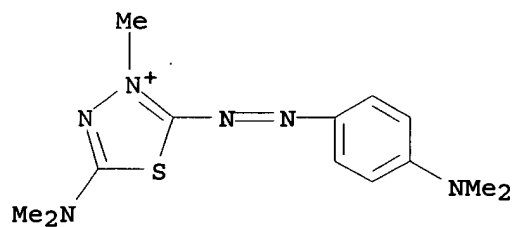
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S



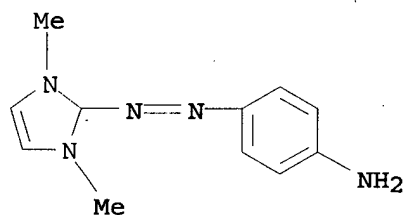
CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

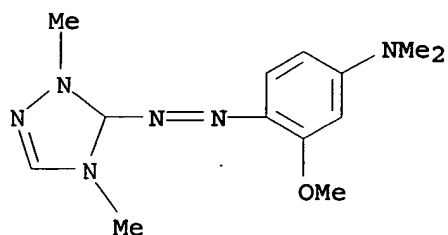
RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride  
(9CI) (CA INDEX NAME)● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-  
1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

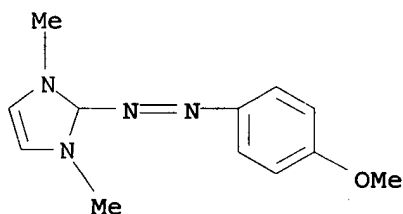


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

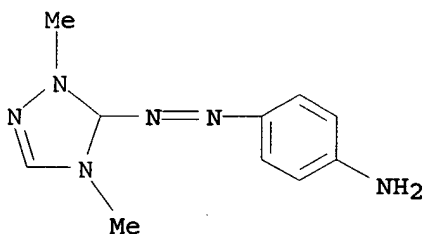


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



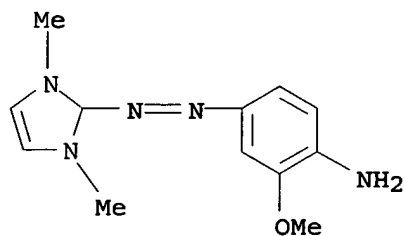
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-,

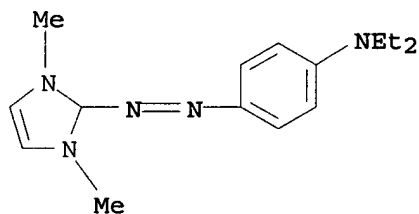
chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

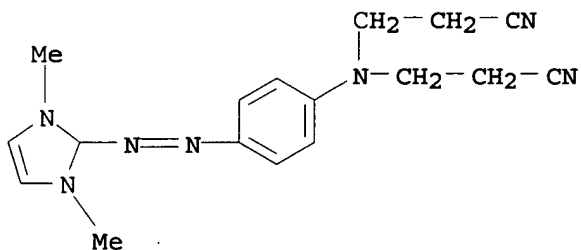
CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

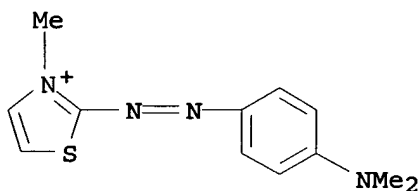
RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

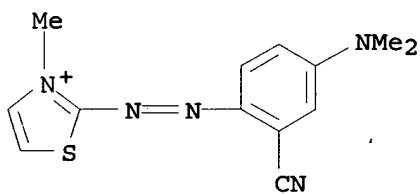
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS  
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride  
(9CI) (CA INDEX NAME)



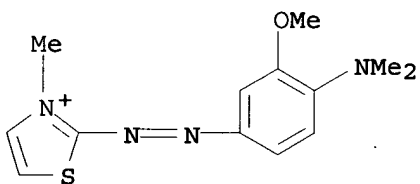
● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS  
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

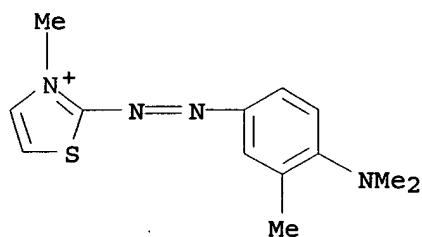
RN 161329-17-5 HCAPLUS  
CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

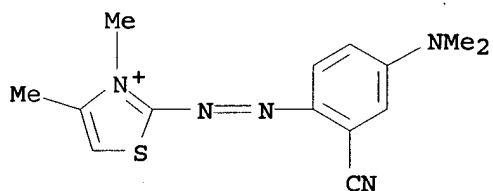
RN 161329-18-6 HCAPLUS  
CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)





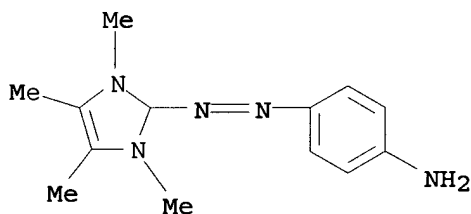
● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS  
 CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

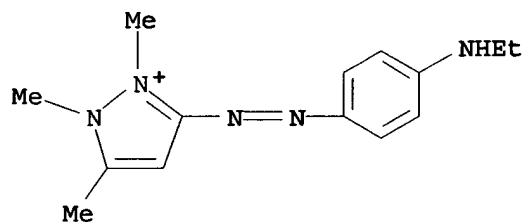
RN 161329-23-3 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-aminophenyl]azo]-1,3,4,5-tetramethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

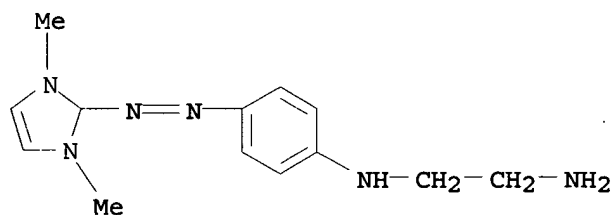
RN 161329-25-5 HCAPLUS  
 CN 1H-Pyrazolium, 3-[[4-(ethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

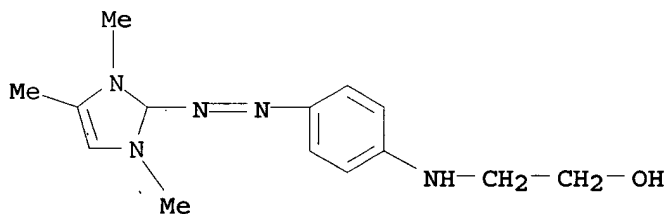


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

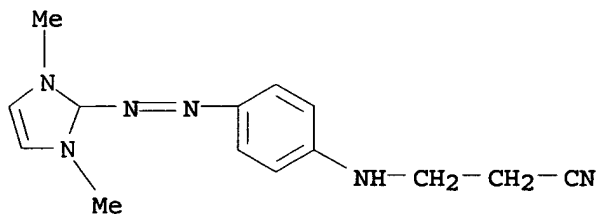


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

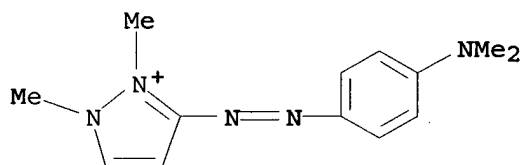


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-30-2 HCAPLUS

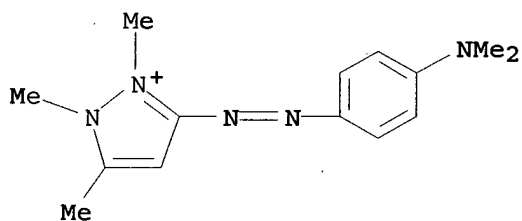
CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

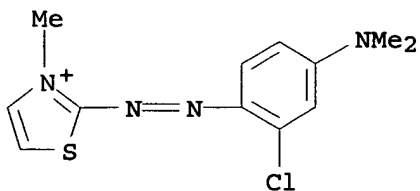
RN 161329-35-7 HCAPLUS

CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6

CMF C12 H14 Cl N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

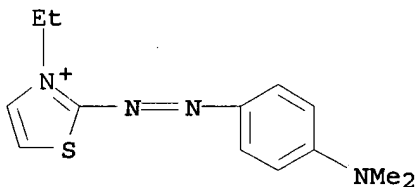
RN 161329-37-9 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

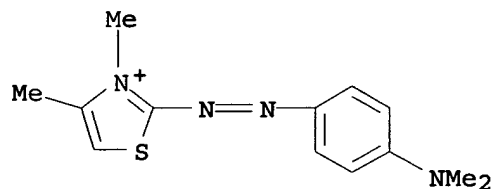
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

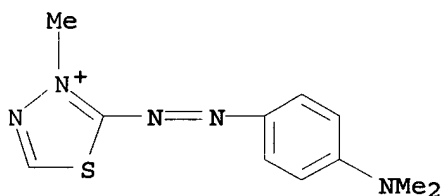
RN 161329-40-4 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

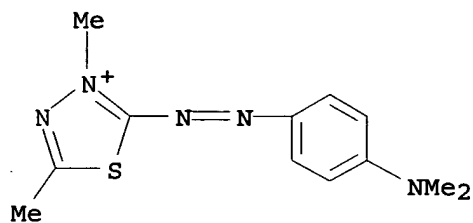
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

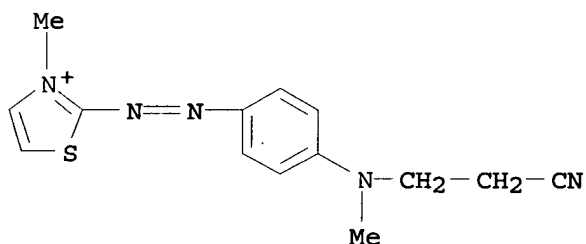
CRN 21228-90-0

CMF C H3 O4 S

Me--O--SO<sub>3</sub><sup>-</sup>

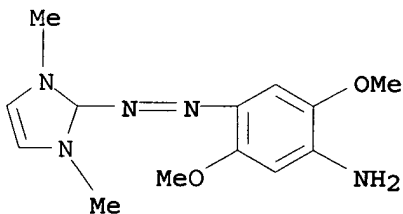
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

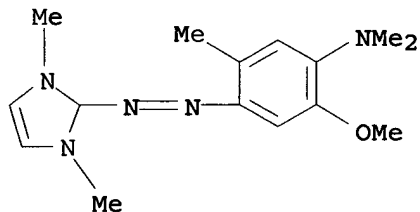
CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

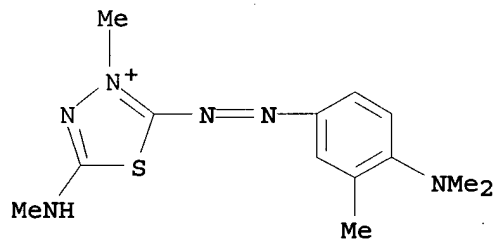
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

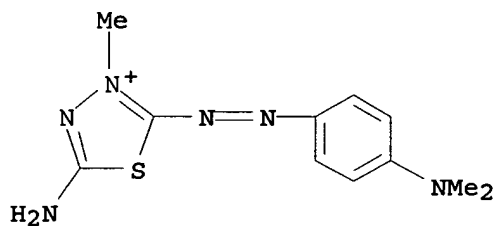
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



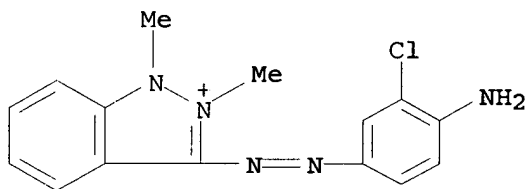
CM 2

CRN 21228-90-0

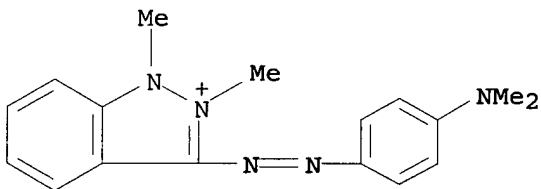
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 167382-87-8 HCAPLUS

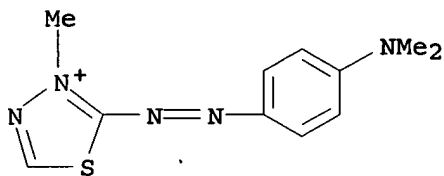
CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS

CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

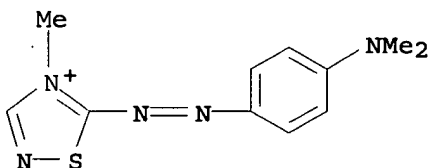


RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



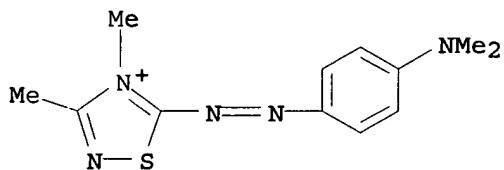
● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



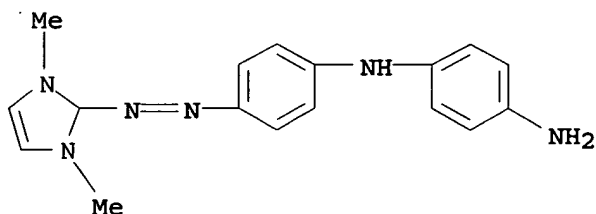
● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)

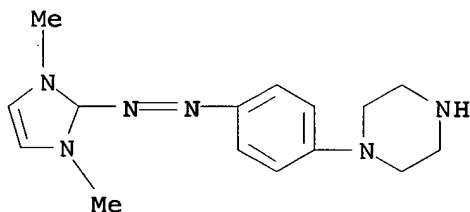


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 89923-52-4

(hair dye compns. containing direct cationic dye and polregyol and/or polyolether)

IT 57-55-6, Propylene glycol, biological studies 1320-67-8,

Propylene glycol monomethyl ether 6687-56-5 39838-87-4

42476-20-0 54940-81-7 62163-15-9 64651-39-4

68259-00-7 68912-02-7 73447-48-0 75655-00-4

77061-58-6 83950-26-9 84912-24-3 92888-19-2

93940-65-9 97404-02-9 97406-09-2 109220-25-9

143084-49-5 160598-04-9 161328-83-2 161328-85-4

161328-86-5 161328-87-6 161328-89-8 161328-91-2

161328-92-3 161328-94-5 161328-95-6 161328-96-7

161328-99-0 161329-01-7 161329-02-8 161329-04-0

161329-05-1 161329-06-2 161329-07-3

161329-08-4 161329-09-5 161329-15-3

161329-16-4 161329-17-5 161329-18-6

161329-22-2 161329-23-3 161329-25-5

161329-27-7 161329-28-8 161329-29-9

161329-30-2 161329-31-3 161329-35-7

161329-37-9 161329-38-0 161329-39-1

161329-40-4 161329-42-6 161329-43-7

161329-44-8 161329-45-9 161329-47-1

161329-49-3 167382-76-5 167382-77-6 167382-78-7  
 167382-79-8 167382-80-1 167382-82-3 167382-83-4  
 167382-87-8 167382-88-9 167382-95-8  
 167382-96-9 167382-97-0 167382-98-1  
 167382-99-2 178822-03-2 178822-05-4  
 211050-61-2 232284-18-3

(hair dye compns. containing direct  
 cationic dye and polyol and/or polyolether)

L26 ANSWER 55 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:763689 HCAPLUS

DOCUMENT NUMBER: 132:15482

TITLE: Hair dye composition containing a direct  
 cationic dye and a substantive polymer

INVENTOR(S): Lang, Gerard; Cotteret, Jean

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: Eur. Pat. Appl., 49 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 960617	A2	19991201	EP 1999-400978	1999 0421
EP 960617	A3	20000308		
EP 960617	B1	20041006		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2778845	A1	19991126	FR 1998-6549	1998 0525
FR 2778845	B1	20010504		
AT 278377	E	20041015	AT 1999-400978	1999 0421
ES 2230813	T3	20050501	ES 1999-400978	1999 0421
AU 9923918	A1	19991202	AU 1999-23918	1999 0423
AU 726541	B2	20001109		
ZA 9902935	A	19991026	ZA 1999-2935	1999 0426
BR 9902311	A	20000530	BR 1999-2311	1999 0507

CA 2272831	AA	19991125	CA 1999-2272831	1999 0520
MX 9904755	A	20000831	MX 1999-4755	1999 0521
CN 1236608	A	19991201	CN 1999-107017	1999 0524
RU 2166311	C2	20010510	RU 1999-110739	1999 0524
JP 2000007542	A2	20000111	JP 1999-145014	1999 0525
US 2002007521	A1	20020124	US 1999-318209	1999 0525
US 6592633	B2	20030715		
US 2003229950	A1	20031218	US 2003-442211	2003 0521
US 6899739	B2	20050531		
PRIORITY APPLN. INFO.:			FR 1998-6549	A 1998 0525
			US 1999-318209	A1 1999 0525

## OTHER SOURCE(S): MARPAT 132:15482

AB Hair dye composition containing a direct cationic dye and a substantive cationic or amphoteric polymer. A hair dye contained 2(p-dimethylaminophenyl)azo-4-methylpyridine-N-oxide 0.12, ethoxylated nonyl phenol 8.0, a quaternary ammonium polymer 1.0, ethanol 10.0, 2-amino-2-methyl-1-propanol q.s., and water q.s. 100.0g. The composition is applied on the hair for 30 min, then the hair is washed, shampooed, and dried to obtain a strong red color.

IT 7267-43-8 41338-82-3 41338-83-4  
(hair dye composition containing direct cationic dye and substantive polymer)

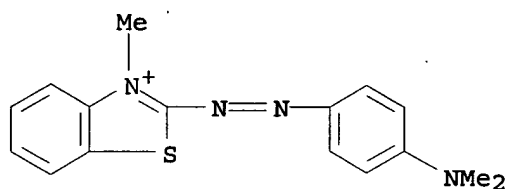
RN 7267-43-8 HCAPLUS

CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 38901-86-9

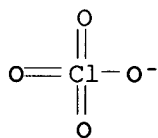
CMF C16 H17 N4 S



CM 2

CRN 14797-73-0

CMF Cl O4



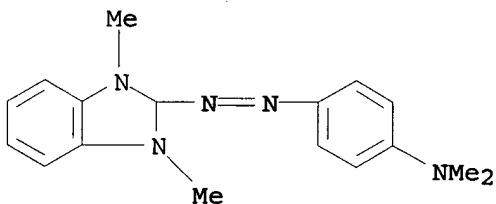
RN 41338-82-3 HCAPLUS

CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 49873-03-2

CMF C17 H20 N5

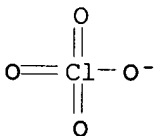


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 14797-73-0

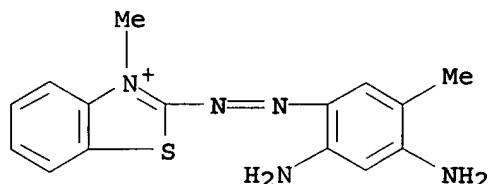
CMF Cl O4



RN 41338-83-4 HCAPLUS

CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-,

iodide (9CI) (CA INDEX NAME)

● I<sup>-</sup>

IC ICM A61K007-13  
 CC 62-4 (Essential Oils and **Cosmetics**)  
 IT 7077-55-6 **7267-43-8** 7687-09-4 7687-11-8  
 26062-79-3, Dimethyldiallylammonium chloride homopolymer  
 26161-33-1 35429-19-7 **41338-82-3 41338-83-4**  
 41338-95-8 41338-98-1 41339-00-8 51473-40-6 51473-50-8  
 52132-00-0 52132-02-2 52132-03-3 52132-04-4 52132-05-5  
 52132-06-6 52132-11-3 52132-12-4 52132-13-5 52132-14-6  
 52132-15-7 52132-16-8 52132-17-9 52132-18-0 52132-19-1  
 52132-20-4 52132-21-5 52132-22-6 52132-23-7 52132-24-8  
 52132-25-9 52132-26-0 52132-27-1 52132-28-2 52132-30-6  
 52132-31-7 53694-17-0 59405-36-6 59405-38-8 59405-42-4  
 59405-44-6 59405-45-7 59405-47-9 59405-48-0 59405-54-8  
 59405-55-9 59405-57-1 59405-59-3 59405-61-7 59405-65-1  
 59405-67-3 59642-65-8 59642-67-0 59642-69-2 59642-73-8  
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 59643-10-6 93569-38-1 93569-39-2 251352-40-6 251352-41-7  
 251352-42-8 251352-43-9 251352-44-0 251352-45-1  
 251352-46-2 251352-47-3 251352-48-4 251352-49-5  
 251352-50-8 251352-53-1 251352-55-3 251352-56-4  
 (hair dye composition containing direct  
 cationic dye and substantive polymer)

L26 ANSWER 56 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1999:468546 HCAPLUS  
 DOCUMENT NUMBER: 131:120593  
 TITLE: Oxidative hair dye compositions containing a  
 laccase and cationic dyes  
 INVENTOR(S): Lang, Gerard; Cotteret, Jean  
 PATENT ASSIGNEE(S): L'Oreal, Fr.  
 SOURCE: PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: **Patent**  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9936034	A1	19990722	WO 1998-FR2752	1998 1216

&lt;--

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU,  
 CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,  
 IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,  
 LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,  
 SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN,  
 YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE,  
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

FR 2773471 A1 19990716 FR 1998-248 1998  
 0113

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FR 2773471 B1 20010413  
 CA 2315921 AA 19990722 CA 1998-2315921 1998  
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AU 9917646 A1 19990802 AU 1999-17646 1998  
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AU 728743 B2 20010118  
 BR 9814732 A 20001017 BR 1998-14732 1998  
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EP 1047376 A1 20001102 EP 1998-962481 1998  
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EP 1047376 B1 20010523  
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 MC, PT, IE, FI  
 ES 2159195 T3 20010916 ES 1998-962481 1998  
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PT 1047376 T 20011030 PT 1998-962481 1998  
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JP 2002509086 T2 20020326 JP 2000-539810 1998  
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RU 2202333 C2 20030420 RU 2000-121054 1998  
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GR 3036415 T3 20011130 GR 2001-401266 2001  
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US 2005193503 A1 20050908 US 2005-60579 2005  
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PRIORITY APPLN. INFO.: FR 1998-248 A 1998

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 WO 1998-FR2752 W  
 1998  
 1216  
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 US 2000-600129 B1  
 2000  
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OTHER SOURCE(S): MARPAT 131:120593

AB A ready-to-use oxidative hair dye composition contains 1 oxidation dye, at least 1 cationic direct dye and at least an enzyme such as laccase. Thus, a hair dye composition contained p-phenylenediamine 0.283, 5-N-( $\beta$ -hydroxyethylamino)-2-methylphenol 0.283, a cationic dye, Basic Red-76 0.094, laccase (180 U/mg) of Rhus vernicifera 1.8 and water to 100 g. This composition also contained a mixture of Oramix 4.8 g and EtOH 20.0 g and the pH was adjusted to 6.5.

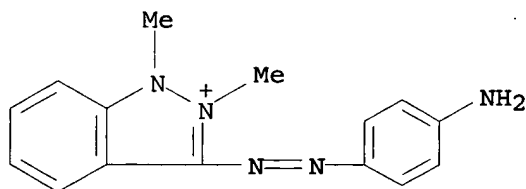
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 68391-31-1 73447-48-0 75655-00-4  
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 97404-02-9 109220-25-9 161328-92-3  
 161329-06-2 161329-07-3 161329-08-4  
 161329-09-5 161329-15-3 161329-16-4  
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 167382-88-9 167382-97-0 167382-98-1  
 167382-99-2 178822-03-2 178822-05-4  
 211050-60-1 223241-31-4 232284-20-7

(oxidative hair dye compns.

containing laccase and cationic dyes)

RN 6687-56-5 HCAPLUS

CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
 (9CI) (CA INDEX NAME)

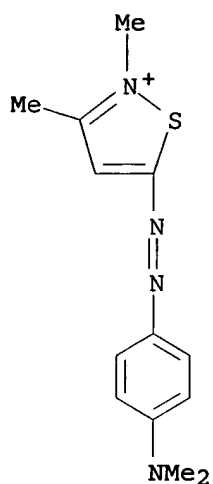


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RN 54940-81-7 HCAPLUS

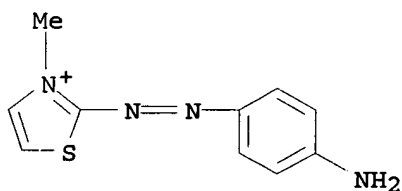
CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-, chloride (9CI) (CA INDEX NAME)





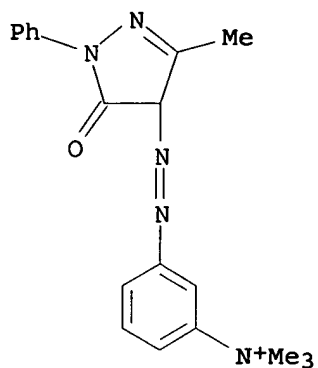
● Cl<sup>-</sup>

RN 62163-15-9 HCAPLUS  
 CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

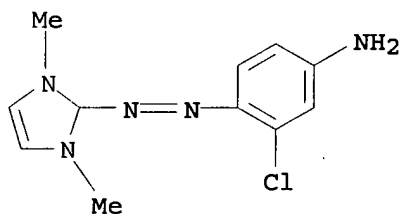
RN 68391-31-1 HCAPLUS  
 CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 73447-48-0 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

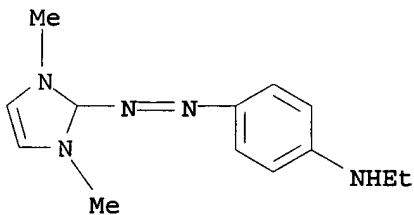


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

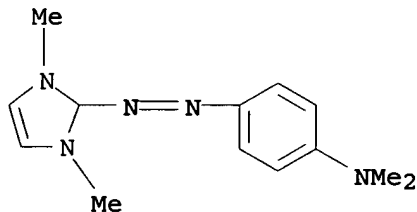


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

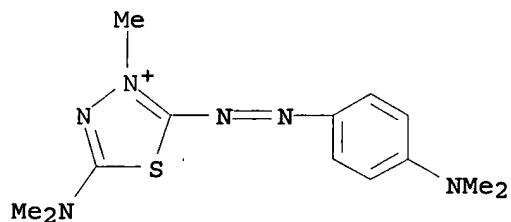
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S



CM 2

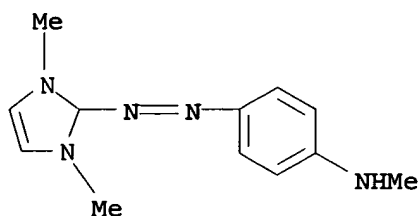
CRN 21228-90-0

CMF C H3 O4 S

Me<sup>-</sup> O<sup>-</sup> SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

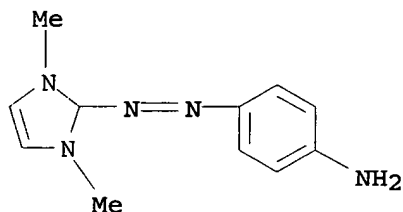


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

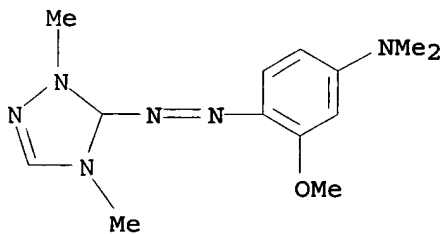


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

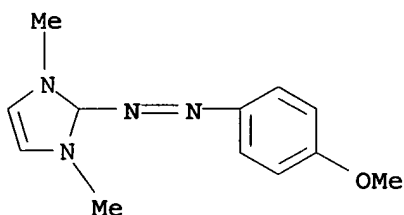


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

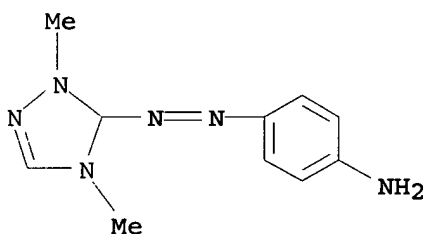


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

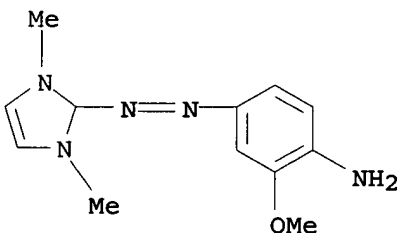


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

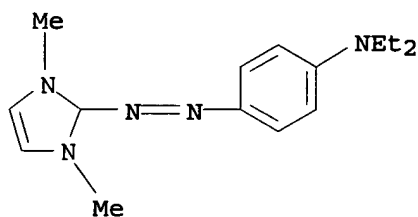


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

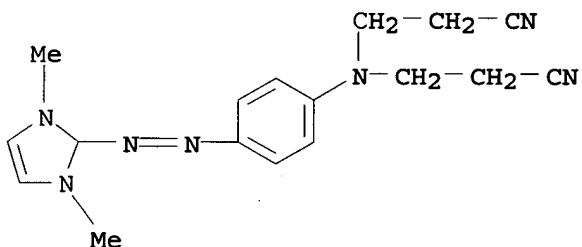


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

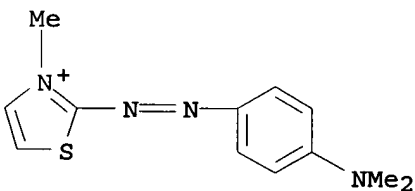


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

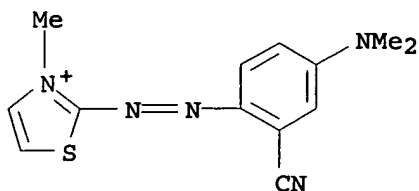


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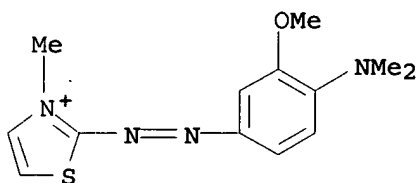
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-,

chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

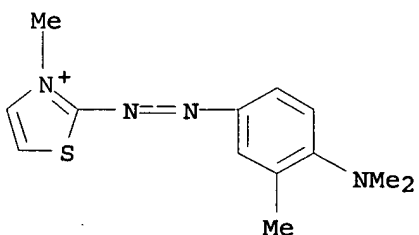
RN 161329-17-5 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

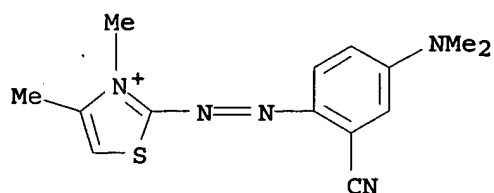
RN 161329-18-6 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

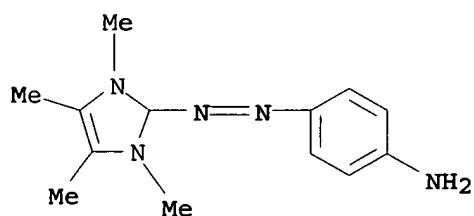
RN 161329-22-2 HCAPLUS

CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

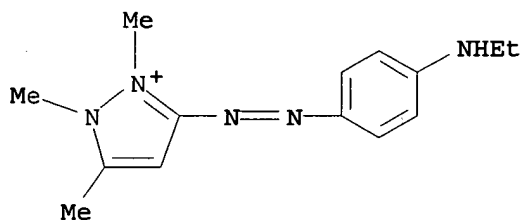
RN 161329-23-3 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(aminophenyl)azo]-1,3,4,5-tetramethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

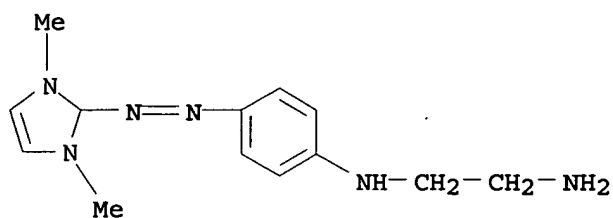
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 CN 1H-Pyrazolium, 3-[[4-(ethylamino)phenyl]azo]-1,2,5-trimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-  
 dimethyl-, chloride (9CI) (CA INDEX NAME)



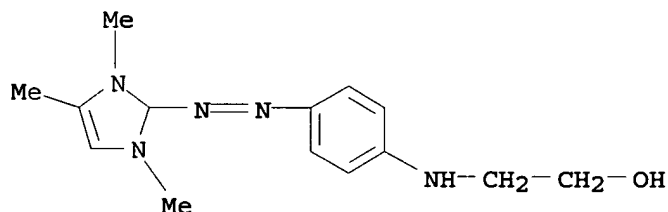


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

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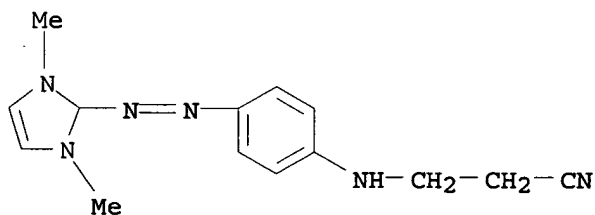


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

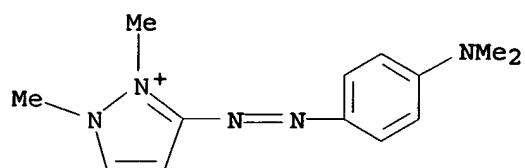


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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

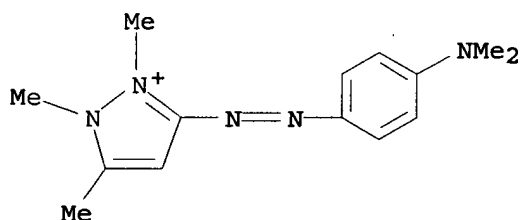
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CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS  
 CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-,  
 chloride (9CI) (CA INDEX NAME)

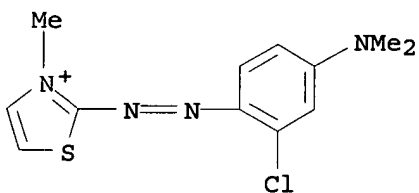


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

CRN 21228-90-0  
 CMF C H3 O4 S

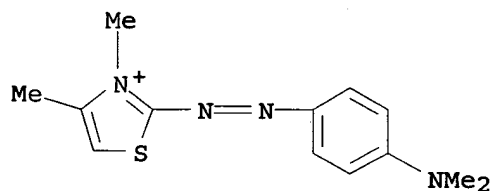
Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-39-1 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

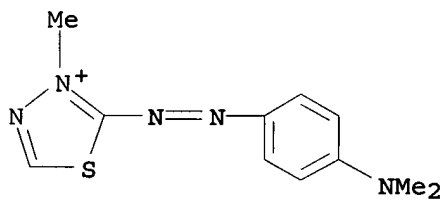
Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-40-4 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

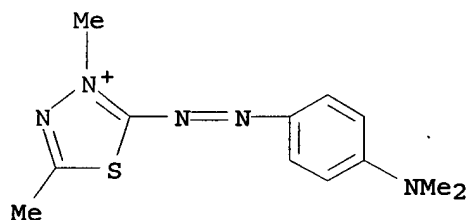
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

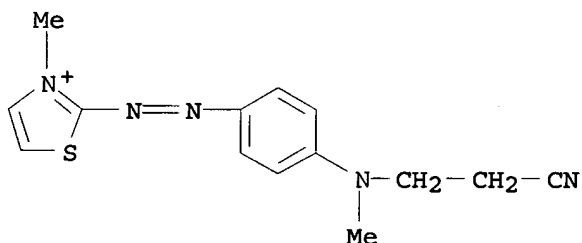
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-43-7 HCAPLUS

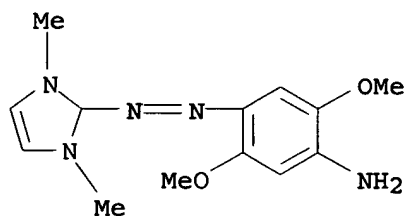
CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

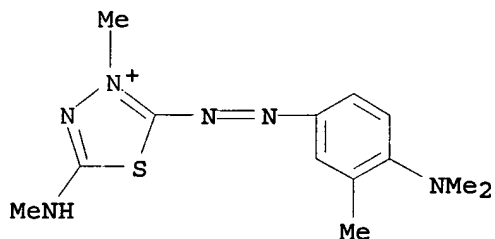
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylanino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

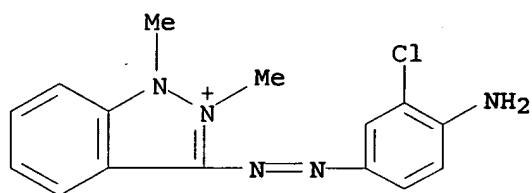
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

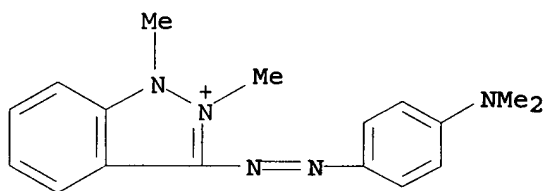
RN 167382-87-8 HCAPLUS

CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



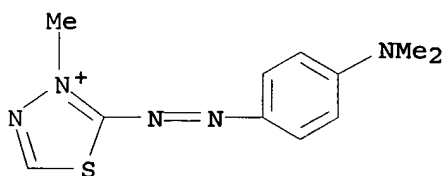
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RN 167382-88-9 HCAPLUS  
 CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



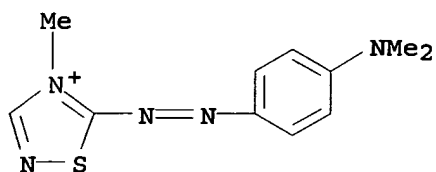
● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
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 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

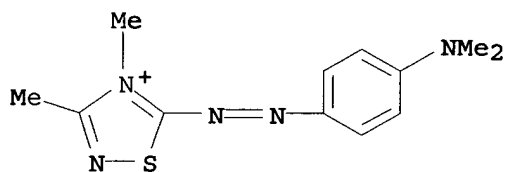
RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS

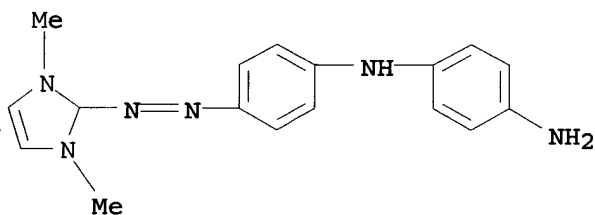
CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

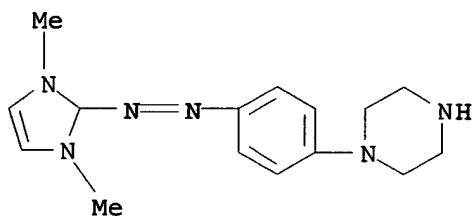


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

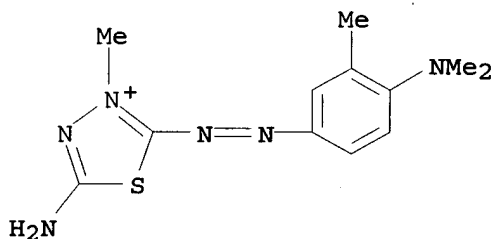
RN 211050-60-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

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CRN 211050-59-8

CMF C12 H17 N6 S



CM 2

CRN 21228-90-0

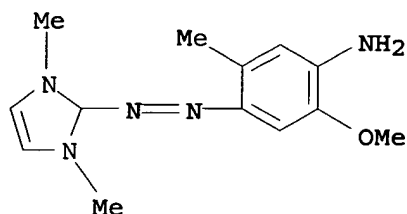
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 223241-31-4 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-5-methoxy-2-methylphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)





● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

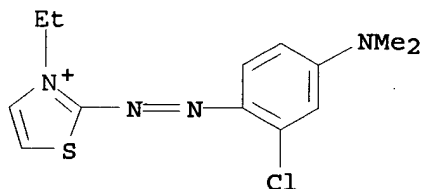
RN 232284-20-7 HCAPLUS

CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-ethyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 232284-19-4

CMF C13 H16 Cl N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me<sup>-</sup> O<sup>-</sup> SO<sub>3</sub><sup>-</sup>

IC ICM A61K007-13

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108-26-9 108-45-2, 1,3-Benzenediamine, biological studies  
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 232284-18-3 232284-20-7

(oxidative hair dye compns.

containing laccase and cationic dyes)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 57 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:244546 HCAPLUS

DOCUMENT NUMBER: 130:301479

TITLE: Oxidative hair dye compositions containing  
 oxidoreductase-type enzymes, oxidation bases,  
 and direct cationic dyes

INVENTOR(S): De La Mettrie, Roland; Cotteret, Jean; De  
 Labbey, Arnaud; Maubru, Mireille

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9917730	A1	19990415	WO 1998-FR2075	1998 0928

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 IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,  
 LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,  
 SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN,  
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PRIORITY APPLN. INFO.:

FR 1997-12353

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WO 1998-FR2075

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1998

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OTHER SOURCE(S): MARPAT 130:301479

AB A ready-to-use oxidation dyeing composition for keratin fibers, and in particular for human keratin fibers such as hair comprise, in a medium appropriate for dyeing at least an oxidation base, at least a direct cationic dye, and at least an oxidoreductase-type enzyme with 2 electrons in the presence of at least a donor for said enzyme. A hair dye composition contained para-phenylenediamine 0.7, 2-(4-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.6, uricase (20 IU/mg) 1.5, uric acid 1.5, excipients and water q.s. 100 g.

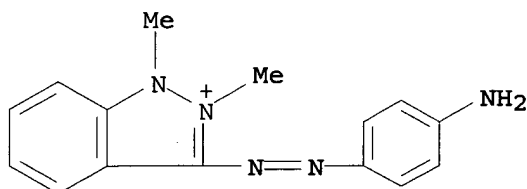
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 223241-31-4

(oxidative hair dye compns.

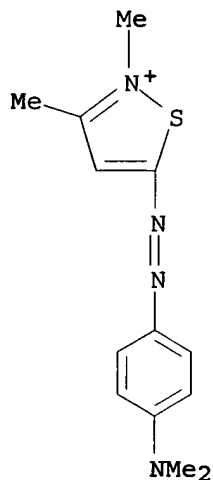
containing oxidoreductase-type enzymes, oxidation bases, and direct cationic dyes)

RN 6687-56-5 HCAPLUS

CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
 (9CI) (CA INDEX NAME)

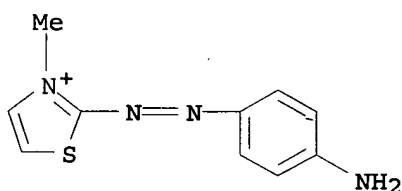
● Cl<sup>-</sup>

RN 54940-81-7 HCAPLUS  
CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



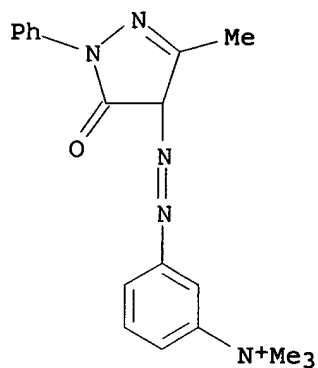
● Cl<sup>-</sup>

RN 62163-15-9 HCAPLUS  
CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA  
INDEX NAME)



● Cl<sup>-</sup>

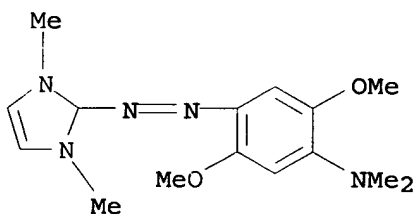
RN 68391-31-1 HCAPLUS  
CN Benzenaminium, 3-[(4,5-dihydro-3-methyl-5-oxo-1-phenyl-1H-pyrazol-  
4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 73287-60-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

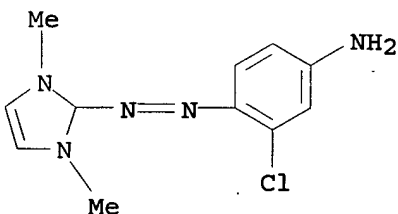


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 73447-48-0 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

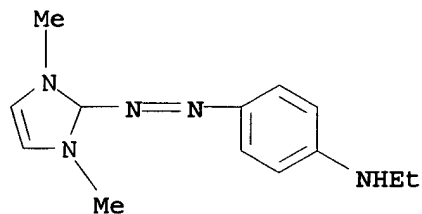


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

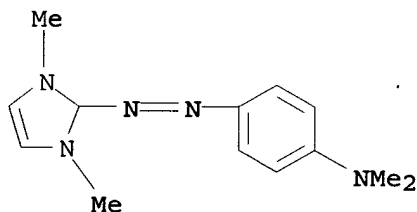


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

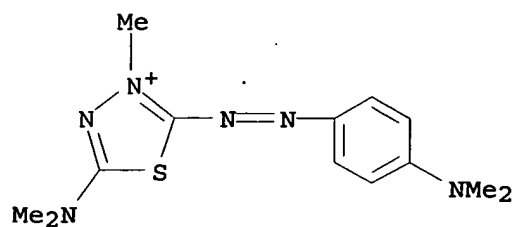
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S



CM 2

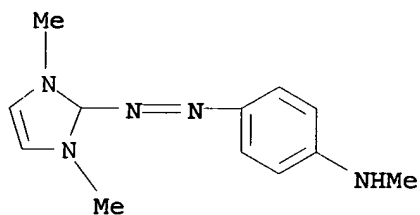
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS

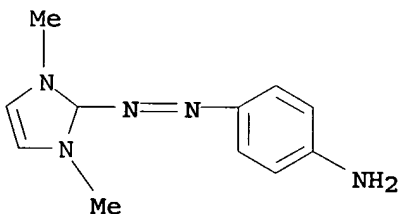
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-aminophenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

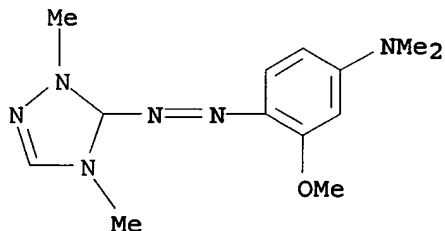
● Cl<sup>-</sup>



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

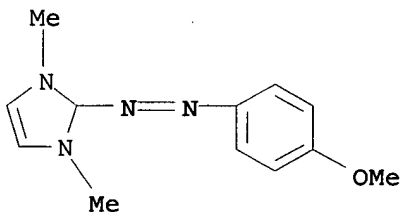


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

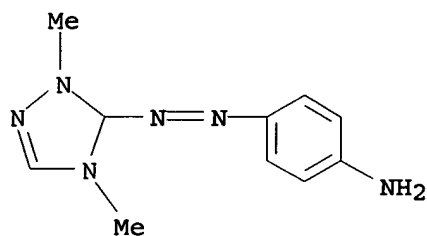


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

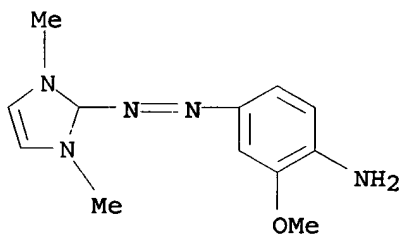


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

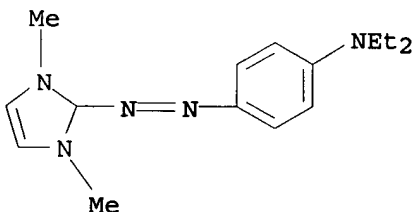


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



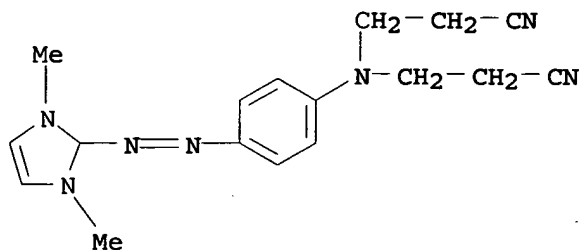
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-

dimethyl-, chloride (9CI) (CA INDEX NAME)

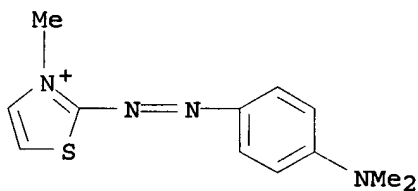


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

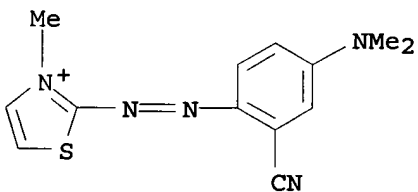
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

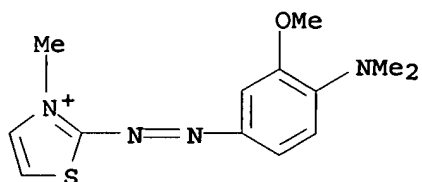
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

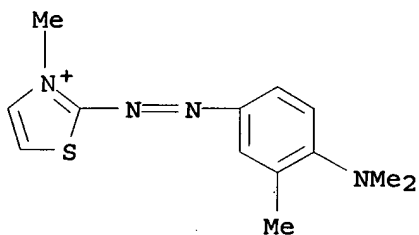
RN 161329-17-5 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



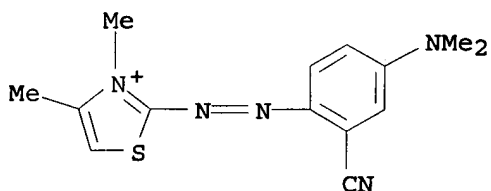
● Cl<sup>-</sup>

RN 161329-18-6 HCAPLUS  
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 chloride (9CI) (CA INDEX NAME)



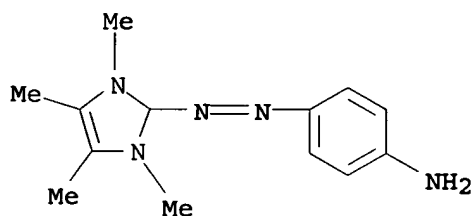
● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS  
 CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-,  
 chloride (9CI) (CA INDEX NAME)

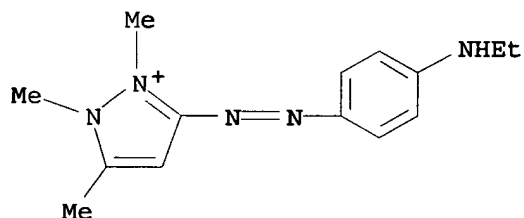


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

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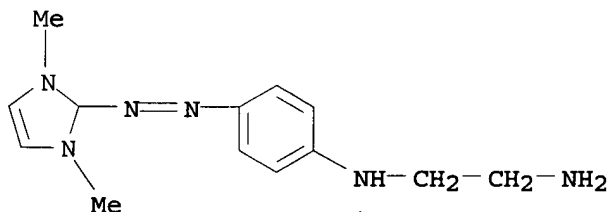
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● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS

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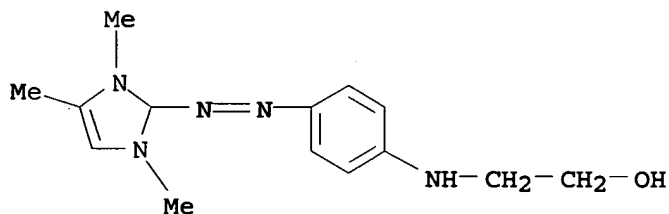


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

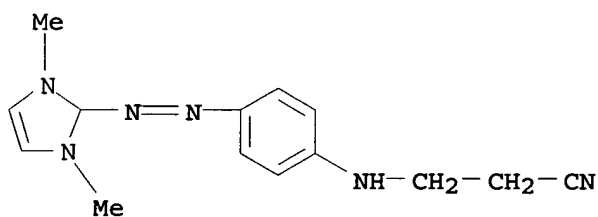


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

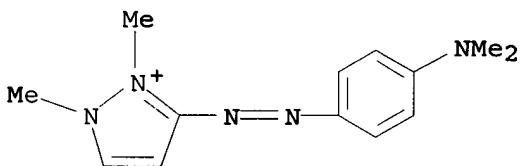


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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

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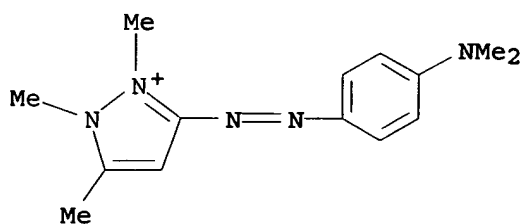
CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)

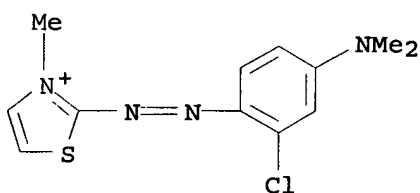


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

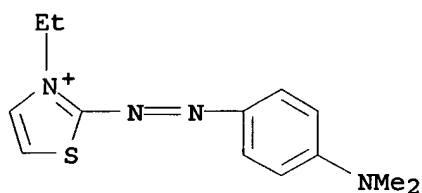
CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-37-9 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl  
 sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8  
 CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

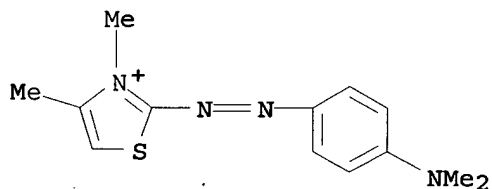
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-40-4 HCAPLUS

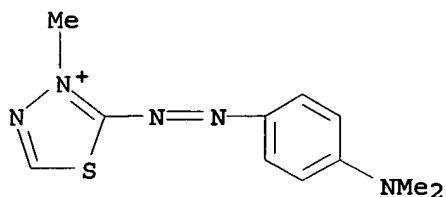
CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S





CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

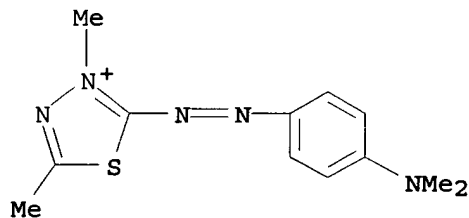
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

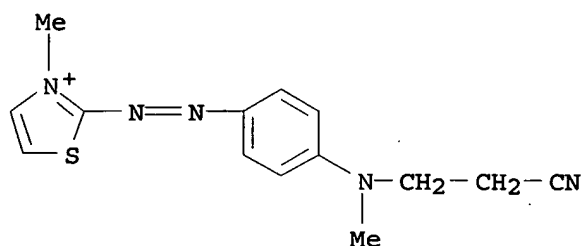
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

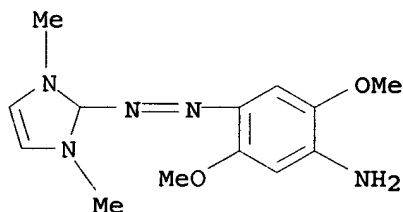
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



RN 161329-44-8 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

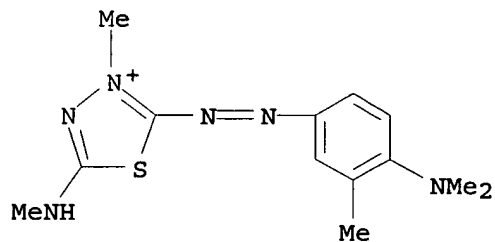
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



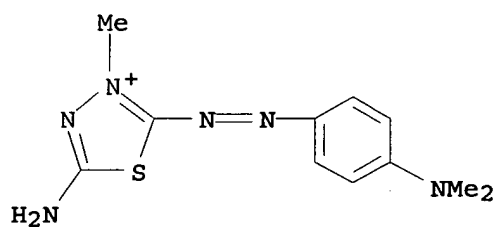
CRN 21228-90-0  
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-49-3 HCAPLUS  
CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2  
CMF C11 H15 N6 S

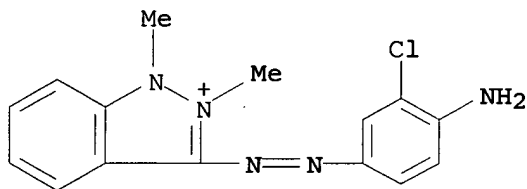


CM 2

CRN 21228-90-0  
CMF C H3 O4 S

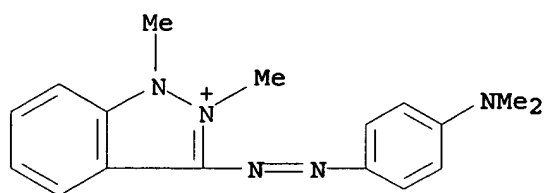
Me-O-SO<sub>3</sub><sup>-</sup>

RN 167382-87-8 HCAPLUS  
CN 1H-Indazolium, 3-[[4-amino-3-chlorophenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



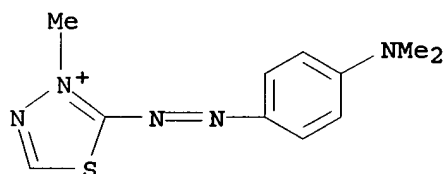
● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS  
CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



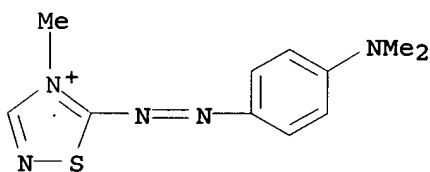
● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



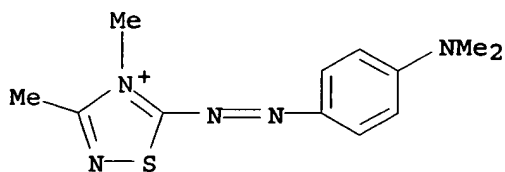
● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



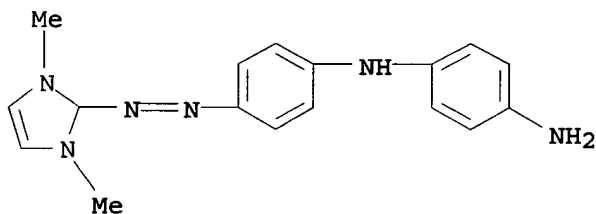
● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS  
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 chloride (9CI) (CA INDEX NAME)



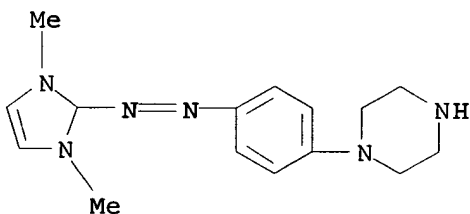
● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



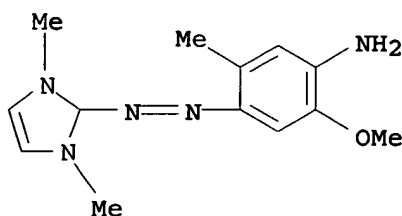
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 178822-05-4 HCAPLUS  
 CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
 RN 223241-31-4 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-amino-5-methoxy-2-methylphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 69-93-2, Uric acid, biological studies 90-01-7,  
 2-Hydroxy-methylphenol 92-65-9 93-05-0, N,N-Diethyl  
 p-phenylenediamine 95-55-6, 2-Aminophenol 95-70-5 99-98-9,  
 N,N-Dimethyl p-phenylenediamine 101-54-2, N-(Phenyl)  
 p-phenylenediamine 106-50-3, 1,4-Benzenediamine, biological  
 studies 108-45-2, 1,3-Benzenediamine, biological studies  
 110-86-1D, Pyridine, derivs., biological studies 123-30-8  
 148-71-0, 4-Amino-N,N-Diethyl 3-methyl aniline 288-13-1D,  
 Pyrazole, derivs. 289-95-2D, Pyrimidine, derivs. 399-95-1,  
 4-Amino-3-fluorophenol 399-96-2, 4-Amino-2-fluorophenol  
 537-65-5 591-27-5 591-27-5D, derivs. 615-66-7, 2-Chloro  
 p-phenylenediamine 1630-11-1, 2,6-Diethyl p-phenylenediamine  
 2359-52-6 2359-53-7 2835-96-3, 4-Amino-2-methylphenol  
 2835-98-5, 2-Amino-5-methylphenol 2835-99-6,  
 4-Amino-3-methylphenol 5306-96-7, 2,3-Dimethyl  
 p-phenylenediamine 5862-80-6 6393-01-7, 2,5-Dimethyl  
 p-phenylenediamine 6687-56-5 7218-02-2, 2,6-Dimethyl  
 p-phenylenediamine 7575-35-1, N,N-Bis-(β-hydroxyethyl)  
 p-phenylenediamine 9001-37-0, Glucose oxidase 9001-96-1,  
 Pyruvate oxidase 9002-12-4, Uricase 9003-99-0, Peroxidase  
 9028-72-2, Lactate oxidase 9055-15-6, Oxidoreductase  
 14791-78-7, 2-Fluoro-p-phenylenediamine 17672-22-9,  
 2-Amino-6-methylphenol 26381-41-9 29785-47-5,  
 4-Amino-2-methoxymethylphenol 37250-80-9, Pyranose oxidase  
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 69669-73-4, Glycerol oxidase 71134-97-9 73287-60-2  
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 89923-52-4 92888-19-2 93841-24-8, 2-β-  
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 97406-09-2 97902-52-8, 2-Isopropyl p-phenylenediamine  
 105293-89-8, N,N-Dipropyl p-phenylenediamine 105607-68-9  
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 178822-05-4 207568-58-9 211050-61-2 221110-58-3  
 223241-29-0 223241-31-4

(oxidative hair dye compns.

containing oxidoreductase-type enzymes, oxidation bases, and direct cationic dyes)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 58 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:586775 HCAPLUS

DOCUMENT NUMBER: 129:166067

TITLE: Oxidative dye compositions for keratin fibers  
 and dyeing method

INVENTOR(S): Rondeau, Christine; Cotteret, Jean; De la  
 Mettrie, Roland

PATENT ASSIGNEE(S): L'Oreal S. A., Fr.

SOURCE: Fr. Demande, 51 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2757384	A1	19980626	FR 1996-15891	1996 1223
			<--	
FR 2757384	B1	19990115		
EP 850637	A1	19980701	EP 1997-402848	1997 1126
			<--	
EP 850637	B1	19990602		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 180664	E	19990615	AT 1997-402848	1997 1126
			<--	
ES 2134672	T3	19991001	ES 1997-402848	1997 1126

AU 9747632	A1	19980625	AU 1997-47632	<--	1997 1209
AU 705812	B2	19990603		<--	
ZA 9711241	A	19980626	ZA 1997-11241		1997 1215
CZ 291831	B6	20030618	CZ 1997-4079	<--	1997 1217
US 5993490	A	19991130	US 1997-994130	<--	1997 1219
CA 2222851	AA	19980623	CA 1997-2222851	<--	1997 1222
CA 2222851	C	20030211		<--	
JP 10218746	A2	19980818	JP 1997-353834		1997 1222
JP 2954121	B2	19990927		<--	
CN 1192356	A	19980909	CN 1997-120896		1997 1222
CN 1119988	B	20030903		<--	
RU 2160084	C2	20001210	RU 1997-121288		1997 1222
PL 189005	B1	20050531	PL 1997-323984	<--	1997 1222
BR 9706327	A	19990504	BR 1997-6327	<--	1997 1223
PRIORITY APPLN. INFO.:			FR 1996-15891	<--	1996 1223

## OTHER SOURCE(S): MARPAT 129:166067

AB Oxidative dye compns. for keratin fibers, particularly human hair, contain,  $\geq 1$  oxidation base based o p-phenylenediamine and/or bisphenylalkylenediamines or their acid salts,  $\geq 1$  m-diphenol (e.g., resorcinol derivs.) or their acid salts,  $\geq 1$  cationic direct dye based on cationic nitrogen-containing heterocycle derivs., and  $\geq 1$  oxidizing agent. A dyeing method and kit design for packaging the hair dye are also claimed. The dye composition enables good coloration with good luminescence which exhibits good shampoo resistance. Thus, a dye composition of p-phenylenediamine, 1,3-dihydroxybenzene, 1-methyl-4-



carboxaldehydepuridinium methylphenylhydrazone methosulfate and N-[(1,3-dimethylimidazolium-2-yl)azophenyl]-p-phenylenediamine chloride was mixed with hydrogen peroxide and applied for 39 min to naturally gray hair. The dyed hair exhibited a deep chestnut color and exhibited good shampoo resistance.

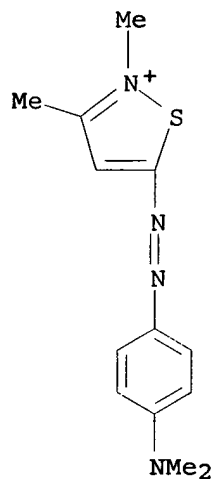
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 161329-42-6 161329-43-7 161329-44-8  
 161329-45-9 161329-47-1 161329-49-3  
 167382-88-9 167382-97-0 167382-98-1  
 167382-99-2 178822-03-2 178822-05-4

(cationic direct dye; oxidative hair dye

compns. with good coloration and shampoo resistance)

RN 54940-81-7 HCAPLUS

CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

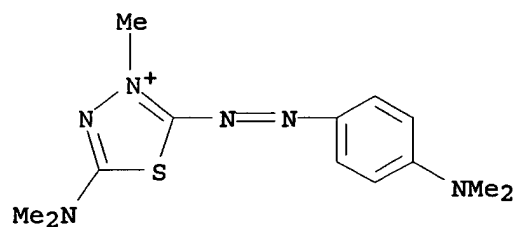
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

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CRN 81921-79-1

CMF C13 H19 N6 S



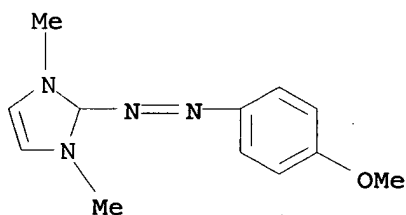
CM 2

CRN 21228-90-0

CMF C H3 O4 S

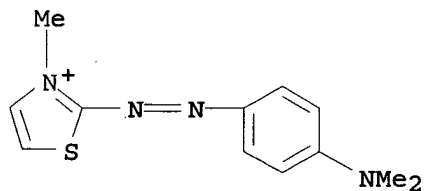
Me-O-SO<sub>3</sub><sup>-</sup>

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride  
(9CI) (CA INDEX NAME)● Cl<sup>-</sup>

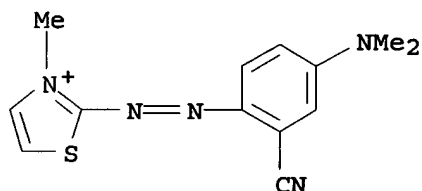
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride  
(9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

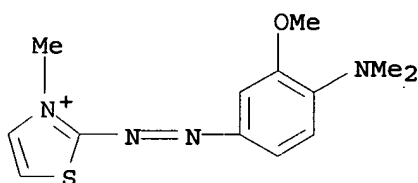
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-17-5 HCAPLUS

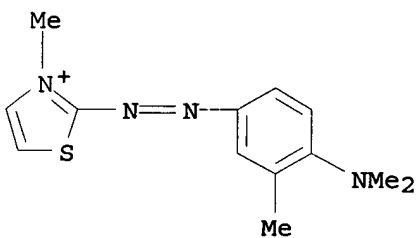
CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-18-6 HCAPLUS

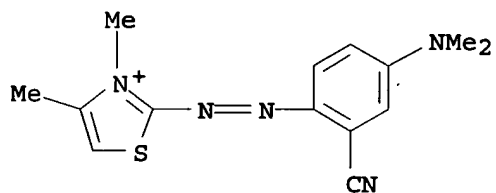
CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS

CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

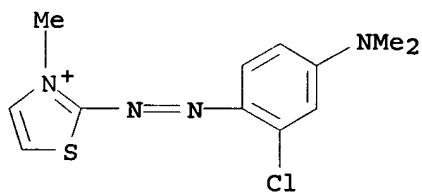


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

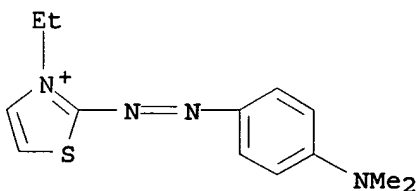
CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-37-9 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl  
 sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8  
 CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

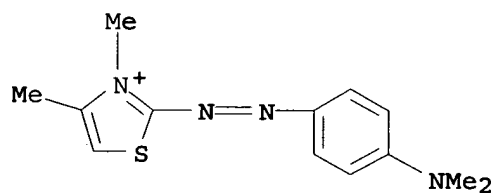
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

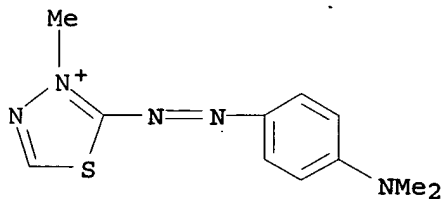
RN 161329-40-4 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

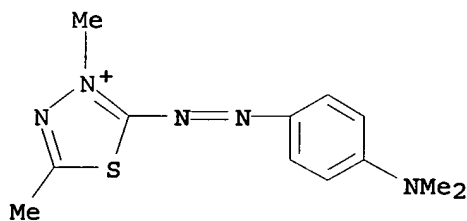
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

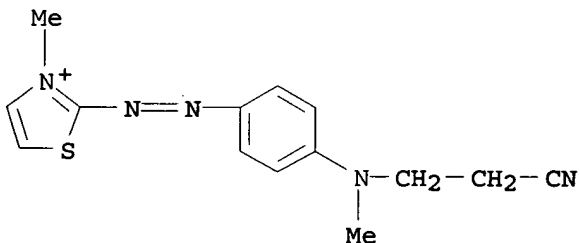
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

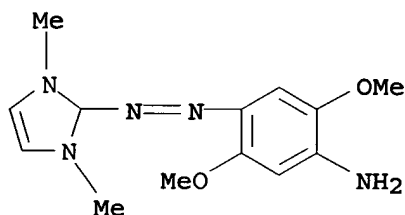
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

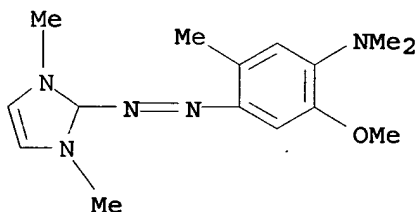


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

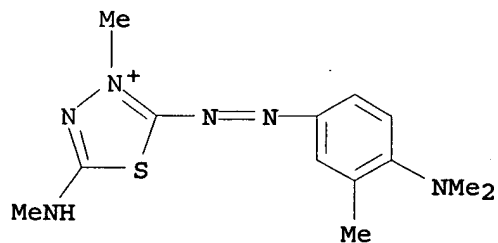
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

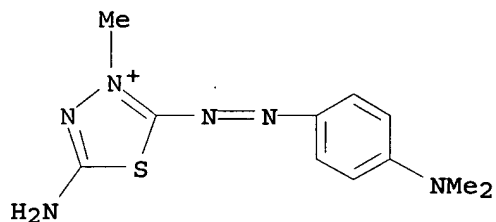
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



CM 2

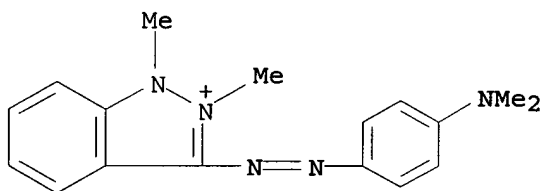
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 167382-88-9 HCAPLUS

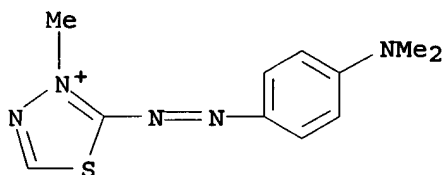
CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS



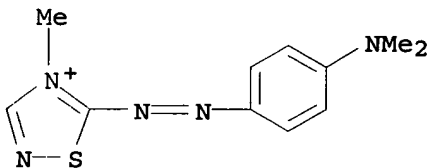
CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS

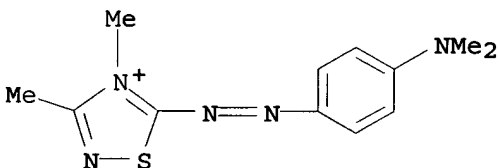
CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS

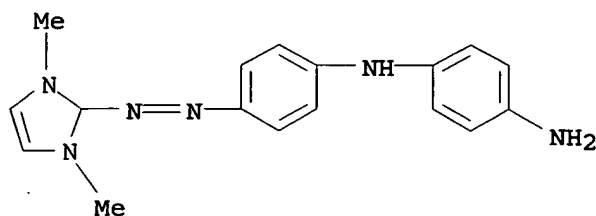
CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

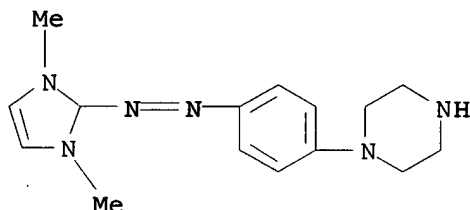


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 41

IT 42476-20-0 54940-81-7 64651-39-4 68259-00-7  
 68912-02-7 83950-26-9 84912-24-3 92888-19-2  
 93940-65-9 97406-09-2 161328-83-2 161328-85-4 161328-86-5  
 161328-87-6 161328-89-8 161328-91-2 161328-92-3  
 161328-94-5 161328-95-6 161329-02-8 161329-15-3  
 161329-16-4 161329-17-5 161329-18-6  
 161329-22-2 161329-35-7 161329-37-9  
 161329-38-0 161329-39-1 161329-40-4  
 161329-42-6 161329-43-7 161329-44-8  
 161329-45-9 161329-47-1 161329-49-3  
 167382-76-5 167382-77-6 167382-78-7 167382-82-3  
 167382-88-9 167382-97-0 167382-98-1  
 167382-99-2 178822-03-2 178822-05-4  
 211050-61-2

(cationic direct dye; oxidative hair dye  
 compns. with good coloration and shampoo resistance)

L26 ANSWER 59 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:577128 HCAPLUS

DOCUMENT NUMBER: 129:166070

TITLE: Oxidative dye compositions containing cationic

direct colorants for keratin fibers and dyeing method

INVENTOR(S): Rondeau, Christine; Cotteret, Jean; De la Mettrie, Roland

PATENT ASSIGNEE(S): L'Oreal S. A., Fr.

SOURCE: Fr. Demande, 69 pp.  
CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2757388	A1	19980626	FR 1996-15895	1996 1223
FR 2757388	B1	19991112	<--	
EP 850638	A1	19980701	EP 1997-402863	1997 1127
EP 850638	B1	19990901	<--	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 183917	E	19990915	AT 1997-402863	1997 1127
ES 2138855	T3	20000116	ES 1997-402863	1997 1127
AU 693751	B1	19980702	AU 1997-47631	1997 1209
ZA 9711309	A	19980623	ZA 1997-11309	1997 1217
CZ 291688	B6	20030514	CZ 1997-4076	1997 1217
US 6001135	A	19991214	US 1997-994444	1997 1219
CA 2222852	AA	19980623	CA 1997-2222852	1997 1222
CA 2222852 JP 10182379	C A2	20030408 19980707	JP 1997-353836	1997 1222

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 RU 2160085 C2 20001210 RU 1997-121289

1997  
 1222

BR 9706323 A 19990504 BR 1997-6323

1997  
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GR 3031724 T3 20000229 GR 1999-402816

1999  
 1103

PRIORITY APPLN. INFO.:

FR 1996-15895

A

1996  
 1223

OTHER SOURCE(S): MARPAT 129:166070

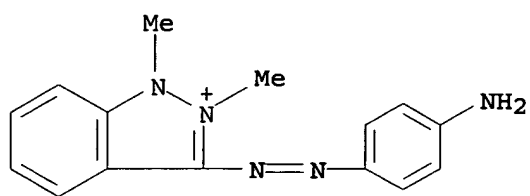
AB The title oxidative dye compns., especially for dyeing hair, contain  $\geq 1$  oxidation base,  $\geq 1$  cationic direct colorant based on substituted nitrogen-containing cationic heterocycle derivs. having N=N, CH=CH or N=CH linkages, and  $\geq 1$  oxidizing agent. The dye compns. enable formation of a wide range of colors and provide rich coloration with good shine and durability. Thus, an oxidative dye composition was formulated from p-phenylenediamine and 4-(1,3-dimethylimidazolium-2-ylazo)-N,N-dimethylaniline chloride. During application, the dye composition was mixed with hydrogen peroxide as oxidizing agent. The composition was applied 30 min to naturally gray hair and then rinsed and shampooed off. The treated hair had an intense red nuance which was resistant to subsequent shampooing.

IT 6687-56-5 54940-81-7 62163-15-9  
 73287-60-2 73447-48-0 75655-00-4  
 77061-58-6 83950-26-9 89923-52-4  
 97404-02-9 109220-25-9 161328-92-3  
 161329-06-2 161329-07-3 161329-08-4  
 161329-09-5 161329-16-4 161329-22-2  
 161329-23-3 161329-25-5 161329-27-7  
 161329-28-8 161329-29-9 161329-30-2  
 161329-31-3 161329-39-1 161329-42-6  
 161329-43-7 161329-44-8 161329-45-9  
 161329-47-1 167382-87-8 167382-88-9  
 167382-97-0 167382-98-1 167382-99-2  
 178822-03-2 178822-05-4 211050-60-1

(cationic direct colorant; oxidative hair dye compns. containing cationic direct colorants with good coloration, shine, and shampoo resistance)

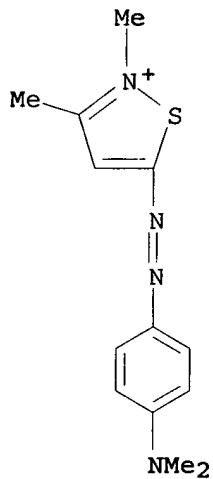
RN 6687-56-5 HCAPLUS

CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



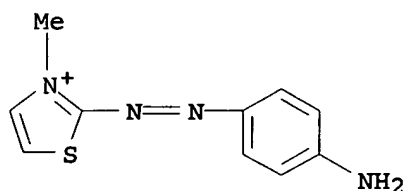
● Cl<sup>-</sup>

RN 54940-81-7 HCAPLUS  
 CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

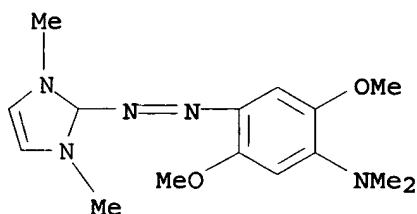
RN 62163-15-9 HCAPLUS  
 CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA  
 INDEX NAME)



● Cl<sup>-</sup>

RN 73287-60-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

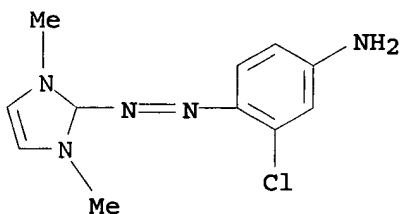


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 73447-48-0 HCAPLUS

CN 1H-Imidazolium, 2-[[4-amino-2-chlorophenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

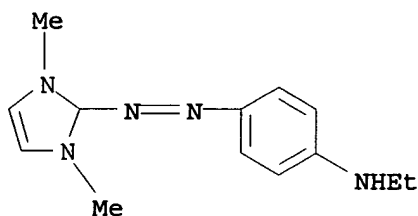


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

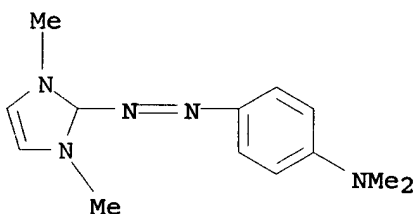


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

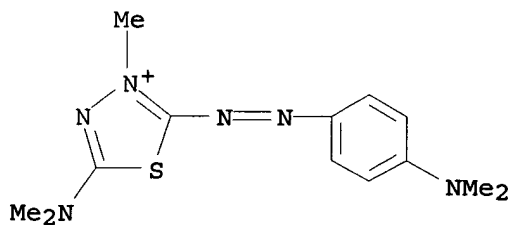
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S

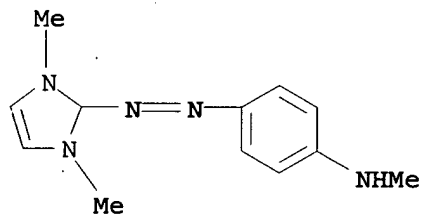


CM 2

CRN 21228-90-0  
CMF C H3 O4 S

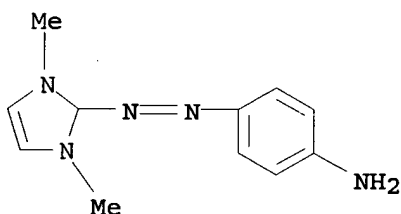
Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS  
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

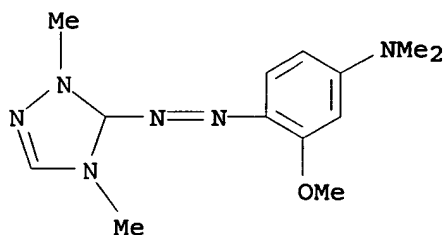
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
RN 97404-02-9 HCAPLUS  
CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
RN 109220-25-9 HCAPLUS  
CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



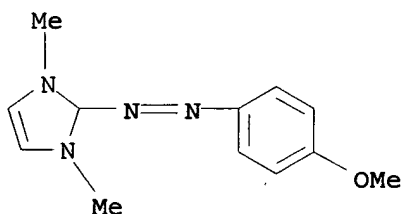


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

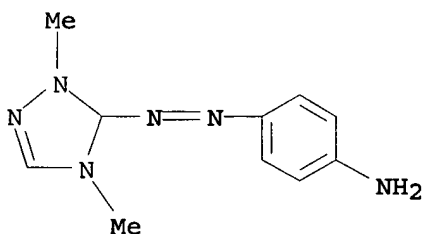


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



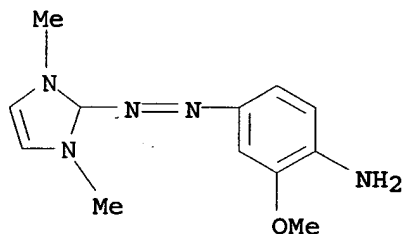
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-,

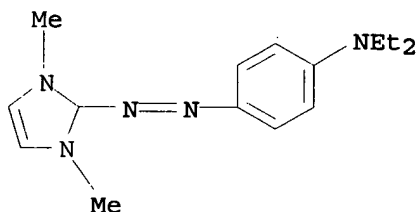
chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

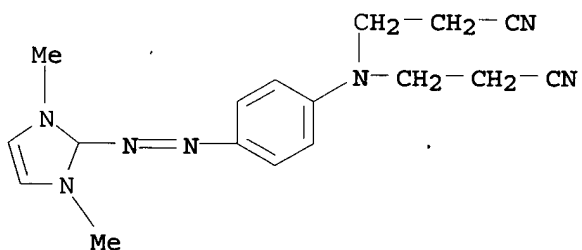
CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

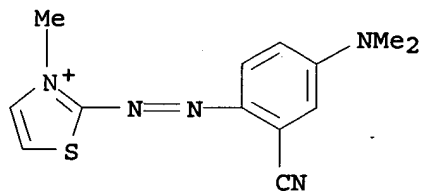
CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

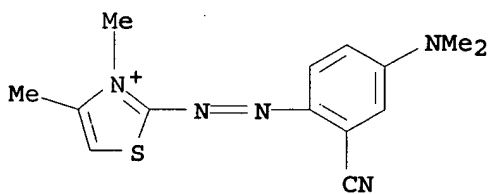
RN 161329-16-4 HCAPLUS

CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

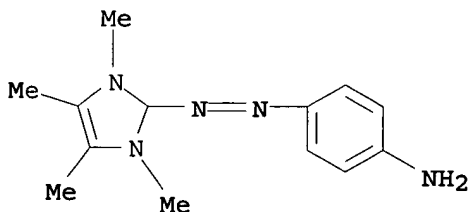
RN 161329-22-2 HCAPLUS

CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS

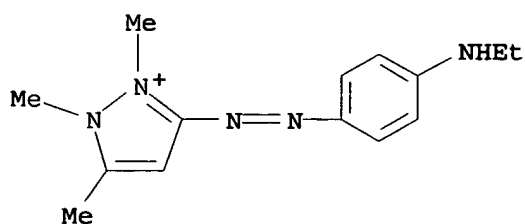
CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-25-5 HCAPLUS

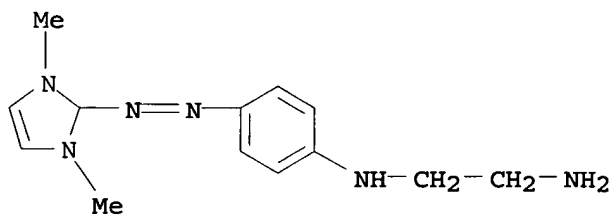
CN 1H-Pyrazolium, 3-[[4-(ethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

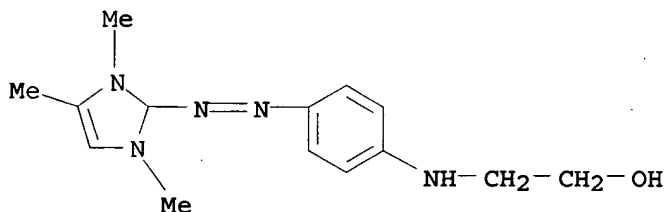


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

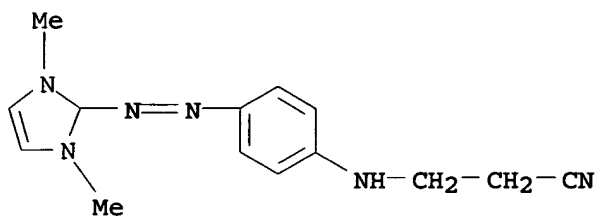


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

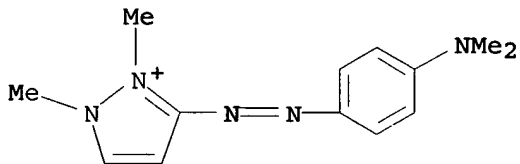


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-30-2 HCAPLUS

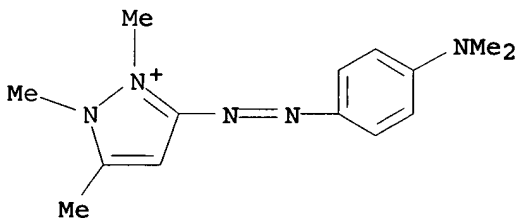
CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

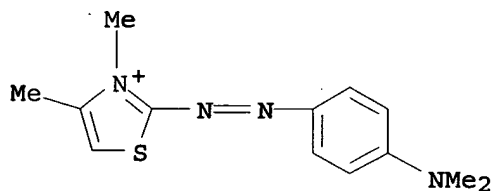
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

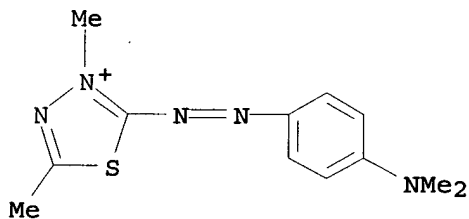
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

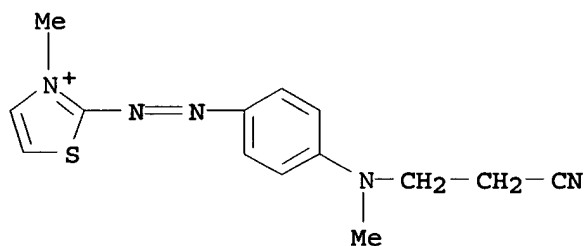
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

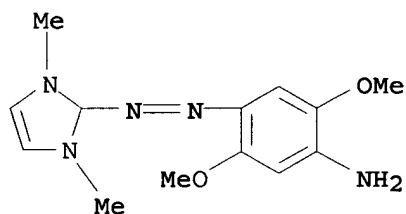
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

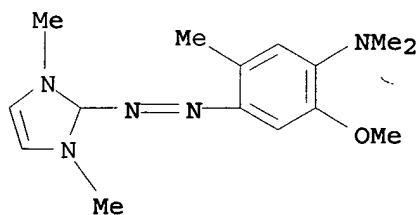
RN 161329-44-8 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

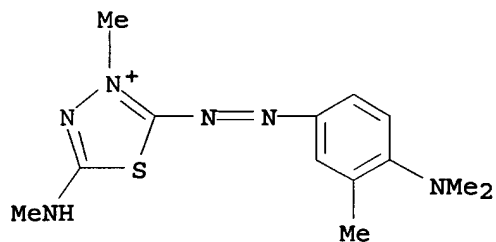
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-47-1 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

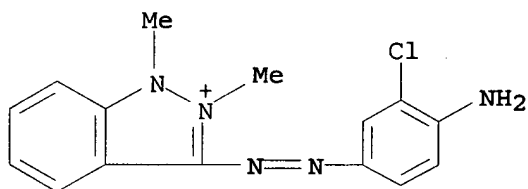
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 167382-87-8 HCAPLUS

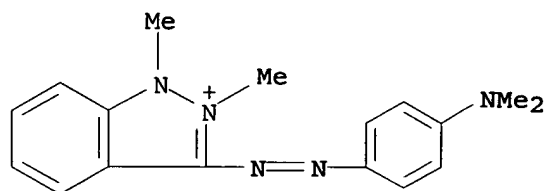
CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS

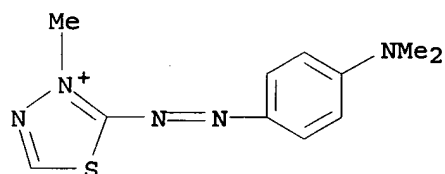
CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)





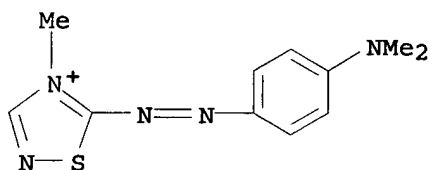
● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



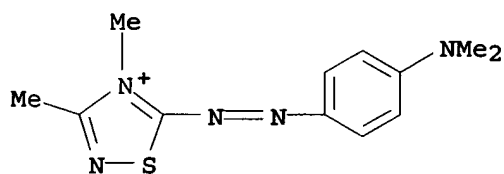
● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



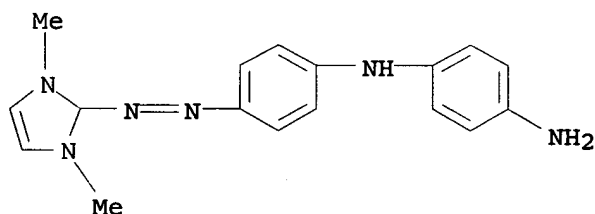
● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

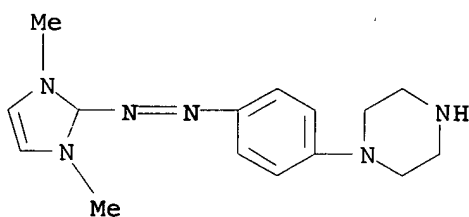
RN 178822-03-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS  
 CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

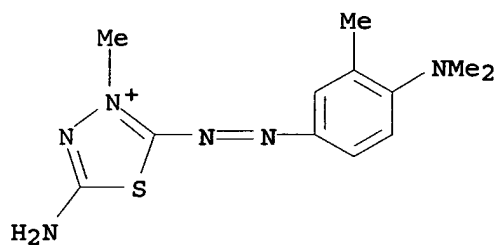
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 211050-60-1 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 211050-59-8

CMF C12 H17 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 41

IT 6687-56-5 39838-87-4 42476-20-0 54940-81-7  
 62163-15-9 64651-39-4 68259-00-7 68912-02-7  
 73287-60-2 73447-48-0 75655-00-4  
 77061-58-6 83950-26-9 84912-24-3  
 89923-52-4 92888-19-2 93940-65-9 97404-02-9  
 97406-09-2 109220-25-9 143084-49-5 160598-04-9  
 161328-83-2 161328-85-4 161328-86-5 161328-87-6  
 161328-89-8 161328-91-2 161328-92-3 161328-94-5  
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 161329-02-8 161329-04-0 161329-05-1 161329-06-2  
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 161329-16-4 161329-22-2 161329-23-3  
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 161329-43-7 161329-44-8 161329-45-9  
 161329-47-1 167382-76-5 167382-77-6 167382-78-7  
 167382-79-8 167382-80-1 167382-82-3 167382-83-4  
 167382-87-8 167382-88-9 167382-95-8  
 167382-96-9 167382-97-0 167382-98-1  
 167382-99-2 178822-03-2 178822-05-4  
 211050-60-1 211050-61-2

(cationic direct colorant; oxidative hair dye

compns. containing cationic direct colorants with good coloration, shine, and shampoo resistance)

L26 ANSWER 60 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:577127 HCAPLUS

DOCUMENT NUMBER: 129:166069

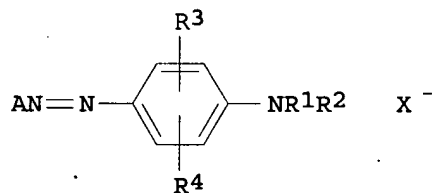
TITLE: Oxidative dye compositions for keratin fibers and method for dyeing

INVENTOR(S): Rondeau, Christine; Cotteret, Jean; De la Mettrie, Roland

PATENT ASSIGNEE(S): L'Oreal S. A., Fr.  
 SOURCE: Fr. Demande, 39 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2757387	A1	19980626	FR 1996-15894	1996 1223
FR 2757387	B1	19990129	<--	
EP 852135	A1	19980708	EP 1997-402864	1997 1127
EP 852135	B1	19990428	<--	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 179325	E	19990515	AT 1997-402864	1997 1127
ES 2134056	T3	19990916	ES 1997-402864	1997 1127
AU 694083	B1	19980709	AU 1997-47630	1997 1209
ZA 9711308	A	19980701	ZA 1997-11308	1997 1217
CZ 291830	B6	20030618	CZ 1997-4078	1997 1217
US 5879412	A	19990309	US 1997-994446	1997 1219
CA 2223722	AA	19980623	CA 1997-2223722	1997 1222
CA 2223722	C	20030318	<--	
JP 10194942	A2	19980728	JP 1997-353835	1997 1222
JP 2954122	B2	19990927	<--	
CN 1189331	A	19980805	CN 1997-120860	1997 1222

CN 1119987	B	20030903	<--	
BR 9706312	A	19990504	BR 1997-6312	1997 1222
HU 220160	B	20011128	HU 1997-2529	1997 1222
RU 2177305	C2	20011227	RU 1997-121232	1997 1222
PL 188879	B1	20050531	PL 1997-323985	1997 1222
PRIORITY APPLN. INFO.:			FR 1996-15894	A 1996 1223
OTHER SOURCE(S):		MARPAT 129:166069	<--	
GI				



AB The title oxidative dye compns., especially for human keratinous fibers such as hair, contain  $\geq 1$  oxidation base chosen from p-phenylenediamines, bisphenylalkylenediamines, and their acid salts;  $\geq 1$  coupler chosen from m-phenylenediamines and their acid salts; and  $\geq 1$  cationic direct colorant I ( $R_1 = H$  or C1-4 alkyl;  $R_2 = H$ , alkyl optionally cyano- or amine-substituted, 4-aminophenyl, or forms with  $R_1$  a heterocycle;  $R_3$  and  $R_4 =$  independently H, halogen, C1-4 alkyl, C1-4 alkoxy, or cyano;  $X^- =$  anion, chosen, preferably from  $Cl^-$ ,  $MeOSO_3^-$ , and  $AcO^-$ ;  $A =$  a substituted cationic nitrogenous heterocycle); and  $\geq 1$  oxidizing agent. The dye compns. enables a rich coloration with good gloss, good properties and durability. Thus, an oxidative dye composition was formed from p-phenylenediamine, 2,4-diamino-1-(2-hydroxyethoxy)benzene dihydrochloride and direct cationic colorant I where  $R_1, R_3, R_4 = H$ ,  $R_2 = 4$ -aminophenyl,  $A = 1,3$ -dimethylimidazolium-2-yl, and  $X^- = Cl^-$  using hydrogen peroxide as the oxidizing agent. The composition was applied to natural gray hair for 30 min to give hair with a luminous chestnut ash tint. The color was resistant to several subsequent shampoos.

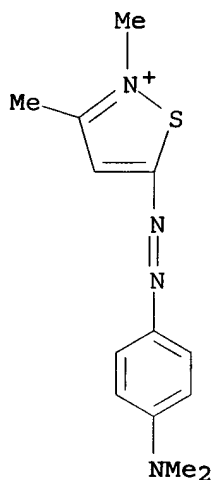
IT 54940-81-7 83950-26-9 161329-15-3  
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 161329-39-1 161329-40-4 161329-42-6  
 161329-43-7 161329-44-8 161329-47-1

161329-49-3 167382-88-9 167382-97-0  
 167382-98-1 167382-99-2 178822-03-2  
 178822-05-4

(cationic direct colorant; oxidative hair dye  
 compns. with good shine and shampoo resistance)

RN 54940-81-7 HCAPLUS

CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

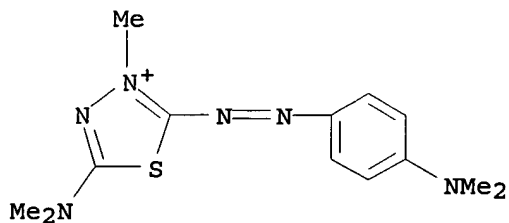
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

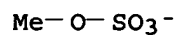
CMF C13 H19 N6 S



CM 2

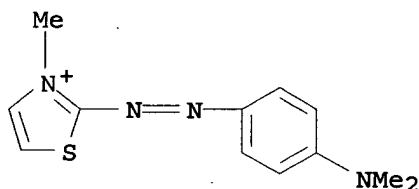
CRN 21228-90-0

CMF C H3 O4 S



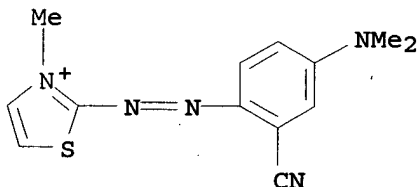
RN 161329-15-3 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride  
(9CI) (CA INDEX NAME)



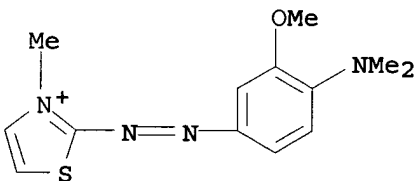
RN 161329-16-4 HCAPLUS

CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



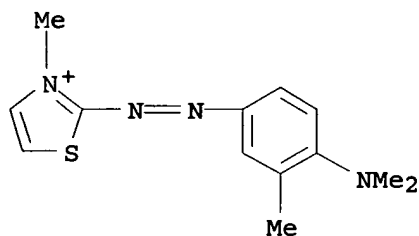
RN 161329-17-5 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



RN 161329-18-6 HCAPLUS

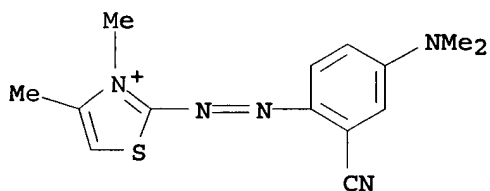
CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS

CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

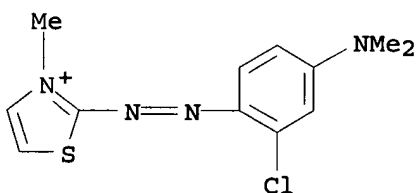
RN 161329-35-7 HCAPLUS

CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6

CMF C12 H14 Cl N4 S



CM 2

CRN 21228-90-0



CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

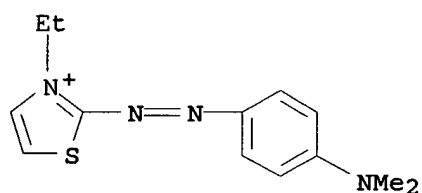
RN 161329-37-9 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

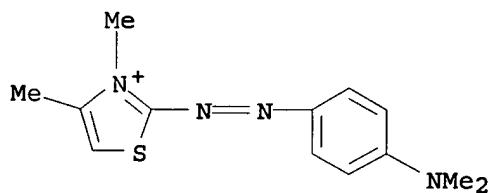
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

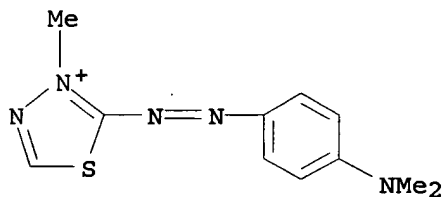
RN 161329-40-4 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

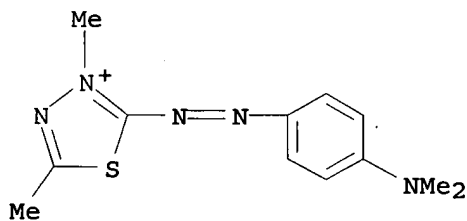
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

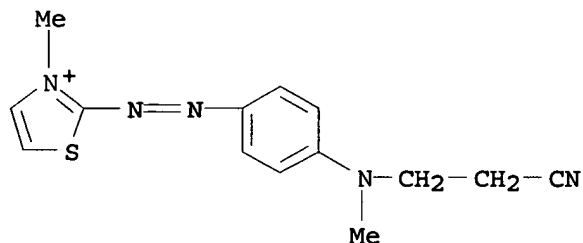
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-43-7 HCAPLUS

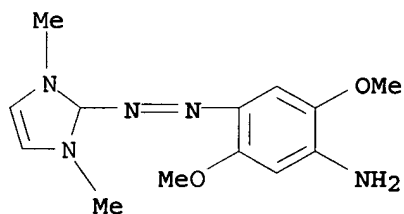
CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

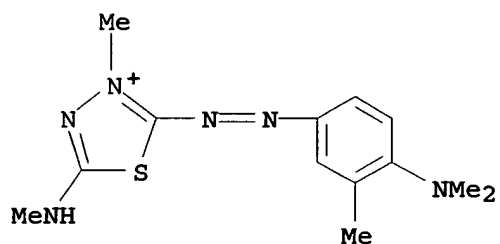
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

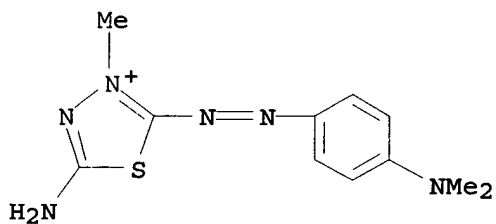
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



CM 2

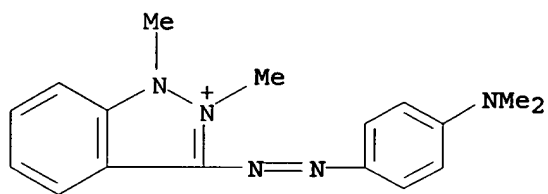
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

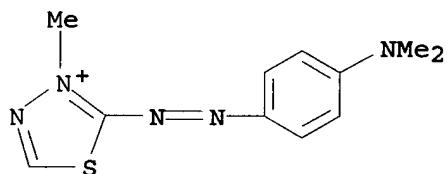
RN 167382-88-9 HCAPLUS

CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



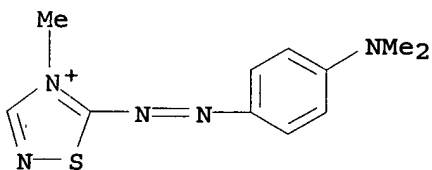
● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



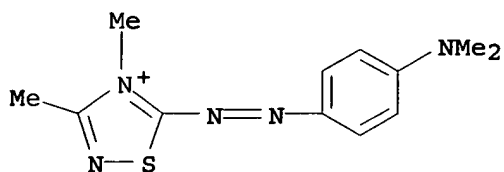
● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



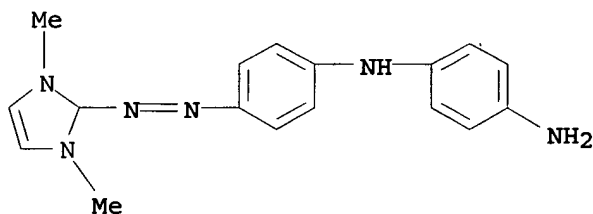
● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

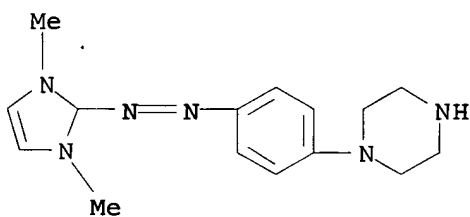
RN 178822-03-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS  
 CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 41  
 IT 54940-81-7 83950-26-9 161329-15-3  
 161329-16-4 161329-17-5 161329-18-6  
 161329-22-2 161329-35-7 161329-37-9  
 161329-39-1 161329-40-4 161329-42-6

161329-43-7 161329-44-8 161329-47-1  
 161329-49-3 167382-76-5 167382-77-6  
 167382-88-9 167382-97-0 167382-98-1  
 167382-99-2 178822-03-2 178822-05-4  
 (cationic direct colorant; oxidative hair dye  
 compns. with good shine and shampoo resistance)

L26 ANSWER 61 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1997:756466 HCAPLUS  
 DOCUMENT NUMBER: 128:39386  
 TITLE: Hair dye composition for simultaneously  
 lightening and coloring hair  
 INVENTOR(S): Said, Hayel; Said, Hian  
 PATENT ASSIGNEE(S): L'Avante Garde, Inc., USA  
 SOURCE: U.S., 13 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5688291	A	19971118	US 1996-671213	1996 0627
WO 9749379	A1	19971231	WO 1997-US11039	1997 0625
W: AU, BR, CA, CN, JP, MX, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9736424	A1	19980114	AU 1997-36424	1997 0625
EP 957893	A1	19991124	EP 1997-933167	1997 0625
EP 957893	B1	20031015		
R: DE, ES, FR, GB, IT				
ES 2208930	T3	20040616	ES 1997-933167	1997 0625
PRIORITY APPLN. INFO.:			US 1996-671213	A 1996 0627
			WO 1997-US11039	W 1997 0625

OTHER SOURCE(S): MARPAT 128:39386  
 AB A single-step process and composition of a category-2 hair bleach which  
 can simultaneously lighten the hair up to seven levels, and

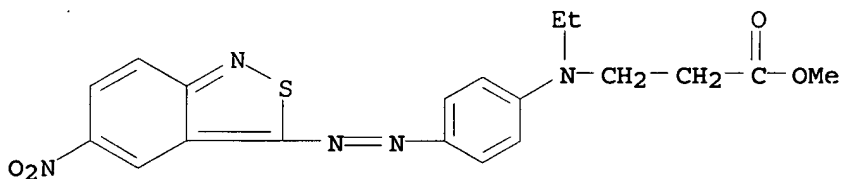
effectively neutralize any undesirable warmth that accompanies the lightening process is disclosed. This is achieved by including in the bleach composition disperse dye mols. which the present invention has found to be both, stable in the bleach, and capable of depositing the desired amount of various permanent tones on the hair. These disperse dyes do not stain the scalp of the client or the hands of the hairdresser, but are substantive only to the hair fibers. The dyes fall into the classes of anthraquinones and azo compds. A bleach powder base contained potassium persulfate 28.0, ammonium persulfate 20.0, sodium silicate 24.0, magnesium oxide 14.5, hydroxyethyl cellulose 5.0, soap beads 6.0, silica 2.0, and disodium EDTA 0.5%. A hair dye powder contained above bleach 99.3, Disperse blue 281 0.5, and Disperse Violet 26 0.2%. The above powder mixture was mixed in the ration of 1:4 with 6% hydrogen peroxide to yield a smooth cream, applied to light brown hair, and place for 10 min at 55° to obtained a pale silver blond color.

IT 52239-04-0 63134-15-6, Disperse Red 338  
68516-81-4, Disperse blue 106 69766-79-6, C.I.  
Disperse Blue 102

(hair dye composition for  
simultaneously lightening and coloring hair)

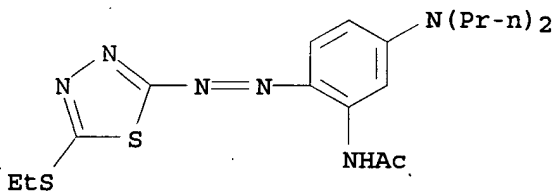
RN 52239-04-0 HCAPLUS

CN  $\beta$ -Alanine, N-ethyl-N-[4-[(5-nitro-2,1-benzisothiazol-3-yl)azo]phenyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 63134-15-6 HCAPLUS

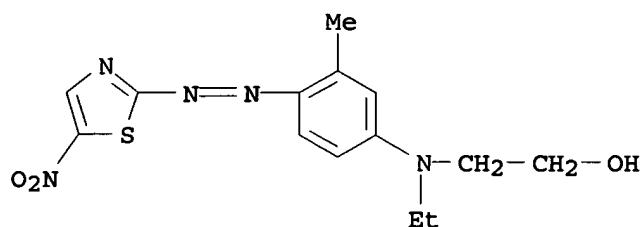
CN Acetamide, N-[5-(dipropylamino)-2-[[5-(ethylthio)-1,3,4-thiadiazol-2-yl]azo]phenyl]- (9CI) (CA INDEX NAME)



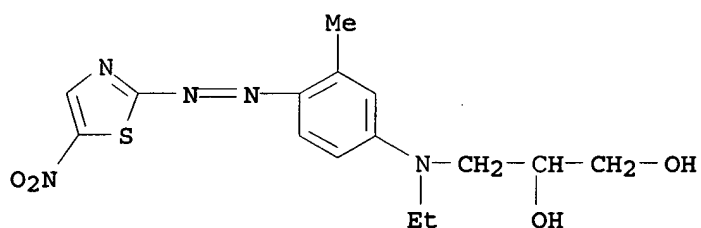
RN 68516-81-4 HCAPLUS

CN Ethanol, 2-[ethyl[3-methyl-4-[(5-nitro-2-thiazolyl)azo]phenyl]amino]- (9CI) (CA INDEX NAME)





RN 69766-79-6 HCAPLUS  
 CN 1,2-Propanediol, 3-[ethyl[3-methyl-4-[(5-nitro-2-thiazolyl)azo]phenyl]amino]- (9CI) (CA INDEX NAME)



IC ICM A61K007-13  
 INCL 008431000  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 730-40-5, Disperse orange 3 6408-72-6, Disperse Violet 26  
 7727-21-1, Potassium persulfate 7727-54-0, Ammonium persulfate  
 52239-04-0 63134-15-6, Disperse Red 338  
 68516-81-4, Disperse blue 106 69766-79-6, C.I.  
 Disperse Blue 102 137573-90-1, Disperse blue 281 199618-80-9,  
 Resolin Blue K  
 (hair dye composition for  
 simultaneously lightening and coloring hair)

L26 ANSWER 62 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1997:706215 HCAPLUS  
 DOCUMENT NUMBER: 128:16279  
 TITLE: One-component hair dye preparations  
 INVENTOR(S): Kaji, Mariko; Fukumasu, Akio  
 PATENT ASSIGNEE(S): Sunstar K. K., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09278635	A2	19971028	JP 1996-90915	1996 0412

PRIORITY APPLN. INFO.: JP 1996-90915 1996

0412

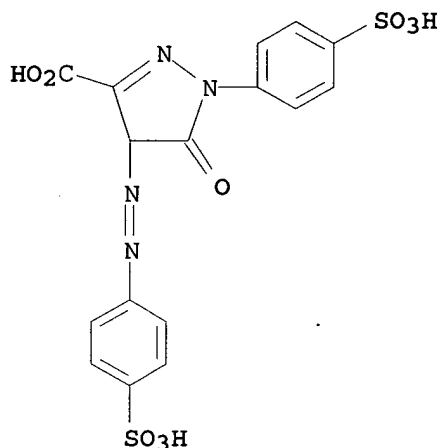
&lt;--

AB One-component hair dye prepns. showing excellent storage stability comprise dyes such as Japan green 3, Japan black 401 and Japan purple 401, oxidizing agents, and oxidation stabilizers in addition to other ingredients [final pH = 1.5-5].

IT 1934-21-0, Japan yellow 4  
(one-component hair dye compns.)

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



●3 Na

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 99-57-0 121-88-0, 3-Hydroxy-4-aminonitrobenzene 128-95-0, 1,4-DiAminoanthraquinone 633-96-5, Japan orange 205 915-67-3, Japan red 2 1064-48-8, Japan black 401 1220-94-6, 1-Amino-4-methylaminoanthraquinone 1934-21-0, Japan yellow 4 2353-45-9, Japan green 3 2611-82-7, Japan red 102 2650-18-2, Japan blue 205 3567-66-6, Japan red 227 4403-90-1, Japan green 201 4430-18-6, Japan purple 401 4548-53-2, Japan red 504 6252-76-2, Japan red 401 8004-92-0, Japan yellow 203 16423-68-0, Japan red 3  
(one-component hair dye compns.)

L26 ANSWER 63 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:701640 HCAPLUS

DOCUMENT NUMBER: 128:7215

TITLE: Hair treatment preparations

INVENTOR(S): Kaji, Mariko; Fukumasu, Akio

PATENT ASSIGNEE(S): Sunstar K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09278634	A2	19971028	JP 1996-90911	1996 0412

PRIORITY APPLN. INFO.:

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JP 1996-909111996  
0412

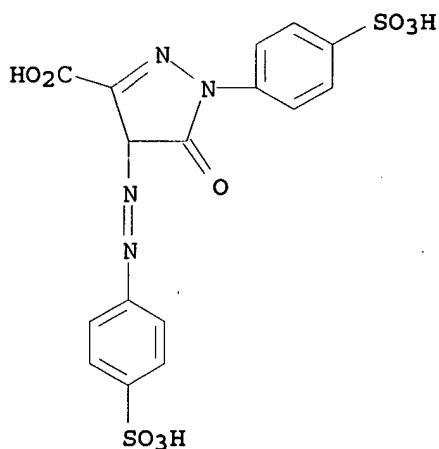
AB Hair treatment prepns. showing excellent hair-dyeing effects comprise dyes, specified aromatic alcs., volatile solvents, water-soluble polymers, oxidizing agents and acids. The prepns. were nondripping after application. A gel acidic hair dye contained dyes 0.5, benzyl alc. 5.0, methylcellulose 3.0, ethanol 5.0, hydrogen peroxide 4.0, phenacetin 0.5, phosphoric acid q.s. and purified water to 100 %.

IT 1934-21-0, Japan yellow 4 6372-96-9, Japan  
yellow 402

(hair dye compns.)

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-  
4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)

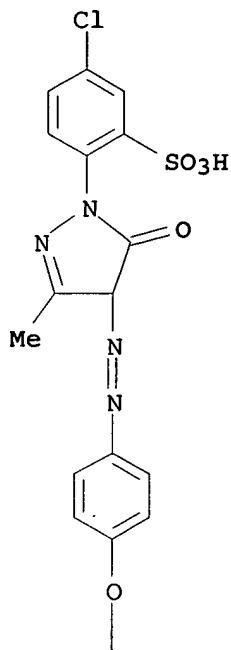


● 3 Na

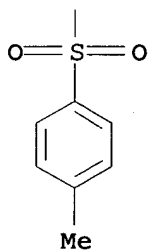
RN 6372-96-9 HCAPLUS

CN Benzenesulfonic acid, 5-chloro-2-[4,5-dihydro-3-methyl-4-[[4-[(4-methylphenyl)sulfonyl]oxy]phenyl]azo]-5-oxo-1H-pyrazol-1-yl]-, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



● Na

IC ICM A61K007-13  
 CC 62-3 (Essential Oils and **Cosmetics**)  
 IT 50-21-5, Lactic acid, biological studies 60-12-8, 2-Phenylethyl  
 alcohol 64-19-7, Acetic acid, biological studies 79-14-1,  
 Glycolic acid, biological studies 93-54-9 98-85-1,  
 α-Methylbenzyl alcohol 99-57-0, 3-Amino-4-  
 hydroxynitrobenzene 100-51-6, Benzyl alcohol, biological studies  
 100-86-7, Dimethylbenzylcarbinol 104-54-1, Cinnamic alcohol  
 110-15-6, Succinic acid, biological studies 121-88-0,  
 3-Hydroxy-4-aminonitrobenzene 122-99-6, Phenoxyethanol  
 128-95-0, 1,4-DiAminoanthraquinone 622-08-2, 2-Benzyloxyethanol  
 633-96-5, Japan orange 205 915-67-3, Japan red 2 1064-48-8,  
 Japan black 401 1220-94-6, 1-Amino-4-methylaminoanthraquinone

1934-21-0, Japan yellow 4 2353-45-9, Japan green 3  
 2611-82-7, Japan red 102 2650-18-2, Japan blue 205 3567-66-6,  
 Japan red 227 4403-90-1, Japan green 201 4430-18-6, Japan  
 purple 401 4452-58-8, Sodium percarbonate 4548-53-2, Japan red  
 504 6252-76-2, Japan red 401 6372-96-9, Japan yellow  
 402 7632-04-4, Sodium perborate 7647-01-0, Hydrochloric acid,  
 biological studies 7647-15-6, Sodium bromide, biological studies  
 7664-38-2, Phosphoric acid, biological studies 7664-93-9,  
 Sulfuric acid, biological studies 7722-84-1, Hydrogen peroxide,  
 biological studies 7727-21-1, Potassium persulfate 7727-54-0,  
 Ammonium persulfate 8004-92-0, Japan yellow 203 9004-64-2,  
 Hydroxypropylcellulose 9004-67-5, Methylcellulose 9032-42-2,  
 Hydroxyethylmethylcellulose 11138-47-9, Sodium perborate  
 11138-66-2, Xanthan gum 15593-29-0, Sodium persulfate  
 16423-68-0, Japan red 3 17372-87-1  
 (hair dye compns.)

L26 ANSWER 64 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:128014 HCAPLUS

DOCUMENT NUMBER: 126:216428

TITLE: Acidic hair dye compositions which comprise  
 acid dyes, benzyl alcohol, and polysiloxane

INVENTOR(S): Ishikawa, Hiroshi

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: U.S., 8 pp., Cont.of U.S. Ser. No. 937, 985,  
 abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5601620	A	19970211	US 1995-442941	1995 0517

PRIORITY APPLN. INFO.:

<--  
 JP 1991-232189 A  
 1991  
 0820

<--  
 JP 1992-42354 A  
 1992  
 0214

<--  
 US 1992-937895 B1  
 1992  
 0930

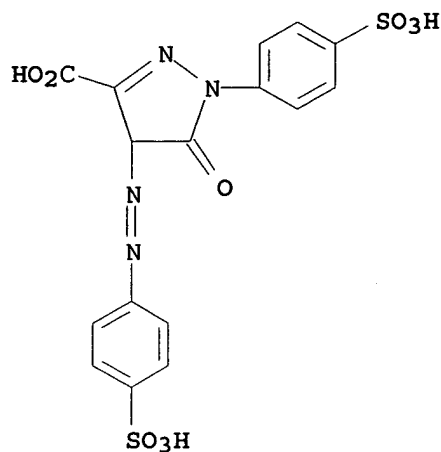
AB An acid dye composition for hair containing (i) 0.01-5.0% by weight of at  
 least one silicone, or (ii) 0.001-0.1% by weight of dye and 1% by weight  
 or more of benzyl alc. based upon the total amount of the composition

IT 1934-21-0

(acidic hair dye compns. which  
 comprise acid dyes, benzyl alc., and polysiloxane)

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-  
 4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



● 3 Na

IC ICM A61K007-13

INCL 008405000

CC 62-3 (Essential Oils and Cosmetics)

IT 57-55-6, 1,2-Propanediol, biological studies 77-92-9, Citric acid, biological studies 97-99-4, Tetrahydrofurfuryl alcohol 100-51-6, Benzyl alcohol, biological studies 107-88-0, 1,3-Butylene glycol 123-76-2, Levulinic acid 541-02-6 872-50-4, N-Methylpyrrolidone, biological studies 1002-67-1 1064-48-8 1934-21-0 4430-18-6 5137-45-1 9004-62-0, Hydroxyethyl cellulose 25265-71-8, Dipropylene glycol 25322-68-3D, hydrogenated 32128-65-7, Polyoxyethylene 2-Octyldodecyl ether 42557-11-9 156048-34-9 188004-10-6 (acidic hair dye compns. which comprise acid dyes, benzyl alc., and polysiloxane)

L26 ANSWER 65 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:61925 HCAPLUS

DOCUMENT NUMBER: 120:61925

TITLE: Keratin fiber-dyeing compositions containing direct dyes and nonionic surfactants

INVENTOR(S): Shibata, Yutaka; Murai, Michiko; Imamura, Takashi

PATENT ASSIGNEE(S): Kao Corp, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05246831	A2	19930924	JP 1992-49573	1992 0306

JP 07000539  
PRIORITY APPLN. INFO.:

B4 19950111

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JP 1992-49573

1992  
0306

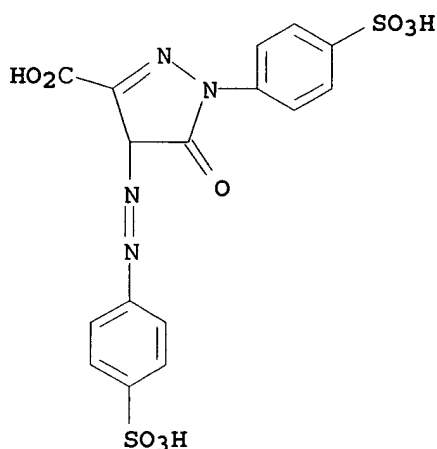
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AB Keratin fiber-dyeing compns. (pH 2.0-4.5), which show good conditioning property, contain direct dyes and nonionic surfactants (HLB = 2-12) having C8-36 branched acyl, alkyl, or alkenyl group. EtOH 25.0, benzyl alc. 5.0, citric acid 0.5, Japan Orange 205 0.05, isostearyl glyceryl ether (HLB 5.5) 2.0, hydroxyethyl cellulose 1.5, NaOH, and H<sub>2</sub>O to 100% by weight were mixed and applied to the hair to cause smooth hair combing property.

IT 1934-21-0, Japan Yellow 4  
(hair dyeing and conditioning  
compns. containing branched nonionic surfactants and)

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-  
4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



●3 Na

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 633-96-5, Japan Orange 205 1064-48-8, Japan Black 401  
1934-21-0, Japan Yellow 4 3520-42-1, Japan Red 106  
4430-18-6, Japan Purple 401

(hair dyeing and conditioning  
compns. containing branched nonionic surfactants and)

L26 ANSWER 66 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:588281 HCAPLUS

DOCUMENT NUMBER: 119:188281

TITLE: Acidic hair dyeing compositions

INVENTOR(S): Ishikawa, Hiroshi; Hyodo, Yoshiho; Arai,  
Yasuhiro

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

DOCUMENT TYPE: CODEN: JKXXAF  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: 1 Japanese  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05194161	A2	19930803	JP 1992-231326	1992 0806

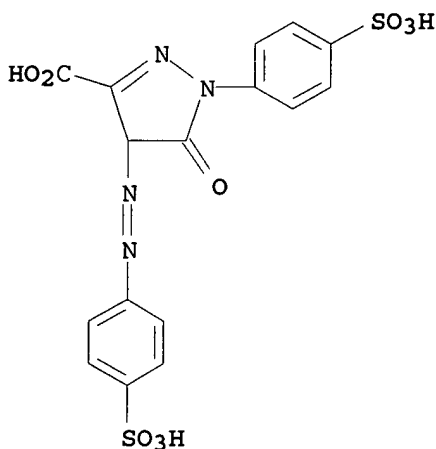
PRIORITY APPLN. INFO.: JP 1991-232190 A1 1991  
 0820

AB The title compns., which show coloring power and are shampoo-resistant, contain 0.01-15.0 weight% cationic compds. and optionally 0.01-5.0 weight% silicones. Japan Black 401 0.2, Japan Purple 401 0.3, Japan Yellow 4 0.1, benzyl alc. 5.0, tetrahydrofurfuryl alc. 12.0, citric acid 2.0, stearyltrimethylammonium chloride 0.3, hydroxyethyl cellulose 3.0, and H2O to 100% were mixed to give a dyeing composition, which showed good coloring power and rinse effect.

IT 1934-21-0, Japan Yellow 4  
 (hair dyeing compns. containing cations and)

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



●3 Na

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 1064-48-8, Japan Black 401 1934-21-0, Japan Yellow 4  
 4430-18-6, Japan Purple 401  
 (hair dyeing compns. containing

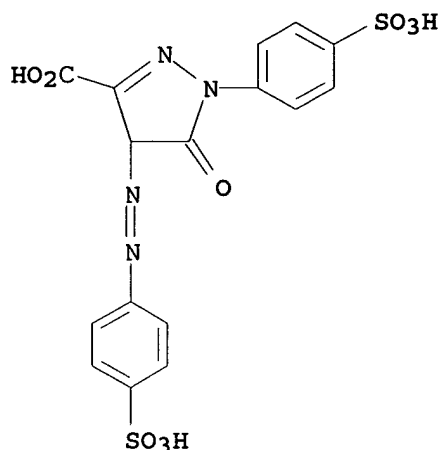


cations and)

L26 ANSWER 67 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1993:524824 HCAPLUS  
 DOCUMENT NUMBER: 119:124824  
 TITLE: Hair dye compositions containing direct dyes  
 and polyoxyalkylene modified siloxanes  
 INVENTOR(S): Imamura, Takashi; Murai, Michiko; Shibata,  
 Yutaka  
 PATENT ASSIGNEE(S): Kao Corp., Japan  
 SOURCE: Eur. Pat. Appl., 14 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 547790	A1	19930623	EP 1992-310788	1992 1125
EP 547790	B1	19950823	<--	
R: DE, FR, GB				
JP 05221837	A2	19930831	JP 1992-307191	1992 1117
JP 2699133	B2	19980119	<--	
PRIORITY APPLN. INFO.:			JP 1991-335166	A 1991 1218

OTHER SOURCE(S): MARPAT 119:124824  
 AB A hair dye composition comprise a direct dye, a polyoxyalkylene modified siloxane containing 3-30% of a polyoxyalkylene group, and an organic solvent, having a pH=2.0-4.5. A hair dye contained EtOH 20.0, benzyl alc. 3.0, citric acid 2.0, C.I. Acid Black 1 0.01, C.I. Acid Violet 43 0.01, C.I. Acid Red 33 0.03, polyoxyethylene modified siloxane 0.5, hydroxycellulose 1.5% and NaOH q.s. for pH=4.0.  
 IT 1934-21-0, C.I. Acid yellow 23  
 (hair dye composition containing polyoxyalkylene siloxane and)  
 RN 1934-21-0 HCAPLUS  
 CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)



● 3 Na

IC ICM A61K007-13  
ICS A61K007-06  
CC 62-3 (Essential Oils and **Cosmetics**)  
IT 633-96-5, C.I. Acid orange 7 846-70-8, C.I. Acid yellow 1  
915-67-3, C.I. Acid red 27 1064-48-8, C.I. Acid black 1  
1934-21-0, C.I. Acid yellow 23 2353-45-9, C.I. Food  
green 3 2611-82-7 2650-18-2, C.I. Acid blue 9 3520-42-1,  
C.I. Acid red 52 3567-66-6, C.I. Acid red 33 3844-45-9, C.I.  
Food blue 2 4403-90-1 4430-18-6, C.I. Acid violet 43  
5858-81-1, C.I. Pigment Red 57 27928-00-3 68123-13-7  
(**hair dye composition** containing  
polyoxyalkylene siloxane and)

L26 ANSWER 68 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:502995 HCAPLUS

DOCUMENT NUMBER: 119:102995

TITLE: Hair dyeing compositions containing quaternary  
ammonium polymers

INVENTOR(S): Fukunishi, Akira; Rikuta, Kazufumi

PATENT ASSIGNEE(S): Sanyo Chemical Ind Ltd, Japan; Tokyo Eazoru  
Kagaku Kk

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: **Patent**

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05112438	A2	19930507	JP 1992-56903	1992 0206
JP 07005454	B4	19950125	JP 1991-246577	A1

PRIORITY APPLN. INFO.:

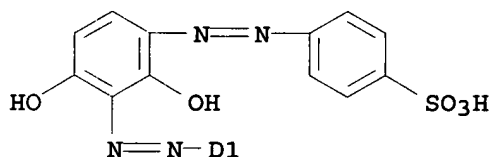
1991  
0831

&lt;--

- AB The title aqueous compns. contain (co)polymers of dialkyldi[(meth)allyl]ammonium salts, C black and/or organic pigments, and acidic dyes. The compns. show good color build-up property, quickly develop shampoo- and sweat-resistant colors, and do not damage the hair. N,N-dimethyl-3,5-methylenepiperidinium chloride polymer 1.5, C black 2.5, acidic dyes (0.5:1:1 Acid Red, Resorcin Brown, and Naphthol Blue Black) 0.5, benzyl alc. 10, N-methylpyrrolidone 15, citric acid 1.5, hydroxy cellulose 1.0, EtOH 7, and H2O to 100% were mixed to give a dyeing composition
- IT 1320-07-6, Resorcin Brown  
(hair dyeing compns. containing carbon black and organic pigments and quaternary ammonium polymers and, shampoo-resistant)
- RN 1320-07-6 HCAPLUS
- CN Benzenesulfonic acid, 4-[[3-[(dimethylphenyl)azo]-2,4-dihydroxyphenyl]azo]-, monosodium salt (9CI) (CA INDEX NAME)

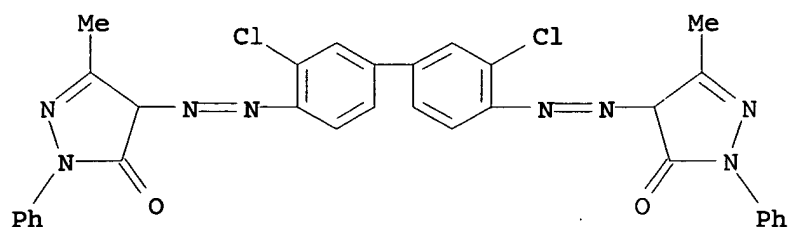


2 ( D1-Me )



● Na

- IT 3520-72-7  
(hair dyeing compns. containing quaternary ammonium polymers and acidic dyes and, shampoo-resistant)
- RN 3520-72-7 HCAPLUS
- CN 3H-Pyrazol-3-one, 4,4'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[2,4-dihydro-5-methyl-2-phenyl- (9CI) (CA INDEX NAME)



IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 1064-48-8, Naphthol Blue Black 1320-07-6, Resorcin Brown  
 11119-62-3, Acid Red  
 (hair dyeing compns. containing  
 carbon black and organic pigments and quaternary ammonium polymers  
 and, shampoo-resistant)  
 IT 147-14-8 3520-72-7 6448-95-9, Brilliant Fast Scarlet  
 (hair dyeing compns. containing  
 quaternary ammonium polymers and acidic dyes and,  
 shampoo-resistant)

L26 ANSWER 69 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1993:219464 HCAPLUS  
 DOCUMENT NUMBER: 118:219464  
 TITLE: Hair dyeing compositions  
 INVENTOR(S): Fukunishi, Akira; Rikuta, Kazufumi  
 PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd., Japan; Tokyo  
 Eazoru Kagaku Kk  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

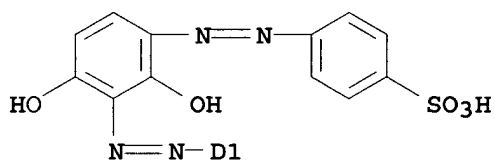
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05025026	A2	19930202	JP 1991-208440	1991 0724
JP 3499573	B2	20040223	JP 1991-208440	1991 0724

AB Aqueous hair dyeing compns., which develop fast and shampoo-resistant colors, contain amphoteric polymers, carbon black, and acidic dyes. An aqueous hair dyeing composition containing copolymer of CH<sub>2</sub>:CMeCO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>N+Me<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>- and Bu methacrylate 1.5, carbon black 2.5, and 0.5:1:1 Japan Red 106-Japan Brown 201-Japan Black 401 mixture 0.5 weight% was formulated.  
 IT 1320-07-6, Japan Brown 201  
 (hair dyeing compns. containing  
 amphoteric polymethacrylates and carbon black and,  
 shampoo-resistant)  
 RN 1320-07-6 HCAPLUS

CN Benzenesulfonic acid, 4-[[3-[(dimethylphenyl)azo]-2,4-dihydroxyphenyl]azo]-, monosodium salt (9CI) (CA INDEX NAME)



2 ( D1-Me )



● Na

IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 1064-48-8, Japan Black 401 1320-07-6, Japan Brown 201  
 3520-42-1, Japan Red 106  
 (hair dyeing compns. containing  
 amphoteric polymethacrylates and carbon black and,  
 shampoo-resistant)

L26 ANSWER 70 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1992:27812 HCAPLUS  
 DOCUMENT NUMBER: 116:27812  
 TITLE: Hair dye compositions containing iron salts  
 and quinoline compounds  
 INVENTOR(S): Kato, Kazuo  
 PATENT ASSIGNEE(S): Hoyu Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03157321	A2	19910705	JP 1990-24816	1990 0202
JP 07042217	B4	19950510	JP 1989-218189	1989 0824

PRIORITY APPLN. INFO.: <--

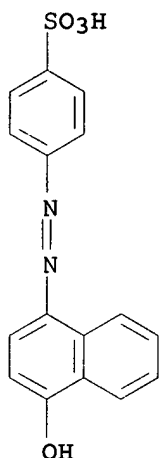
&lt;--

AB A hair dye composition consists of a 1st reagent containing sulfites, bisulfites, thiosulfates and/or thioglycolates and dyes such as Na2 2-(2-quinolin)-1,3-indanedisulfonate (I) and/or 2-(2-quinolin)-1,3-indonedione and a 2nd reagent containing Fe salts and hydroxy compds. The compns. showed improved dyeing capability and hair appeared natural and glossy after treatment. Thus, a hair dye composition consisted of a 1st reagent containing Na2SO3 1.5, Na thiosulfate 1.5, I 0.8, monoethanolamine 5.0, hydroxymethyl cellulose 0.5, and distilled water to 100 weight% and a 2nd reagent containing FeSO4 10.0, pyrogallol 2.0, glucose 1.0, and distilled water to 100 weight %.

IT 523-44-4, Orange I.  
(hair dye compns. containing)

RN 523-44-4 HCAPLUS

CN Benzenesulfonic acid, 4-[(4-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)



● Na

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

IT 68-11-1D, Thioglycolic acid, salts 523-44-4, Orange I  
633-96-5, Orange II 3618-62-0, Chrome Brown RH 7439-89-6D,  
Iron, salts 7720-78-7, Ferrous sulfate 7757-83-7, Sodium  
sulfite 7772-98-7, Sodium thiosulfate 80583-08-0 138215-10-8  
(hair dye compns. containing)

L26 ANSWER 71 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1980:573603 HCAPLUS

DOCUMENT NUMBER: 93:173603

TITLE: Hair dyeing compositions

PATENT ASSIGNEE(S): Kanebo, Ltd., Japan

SOURCE: Jpn. Tokkyo Koho, 3 pp.  
CODEN: JAXXAD

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 55012407	B4	19800402	JP 1966-25354	1966 0420

## PRIORITY APPLN. INFO.:

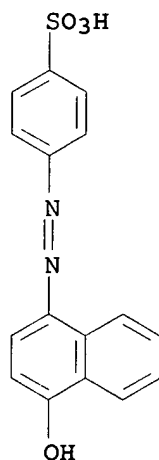
<--  
JP 1966-25354  
1966  
0420

AB Non-irritating hair dyeing compns. containing C2-3 fatty alc. 5-40, BuOH, cyclohexanol, furfuryl alc., Bu cellosolve, or PhCH<sub>2</sub>OH 2-20, an organic or inorg. acid 0.001-5.0, and water to a total of 100 parts in addition to a water-soluble azo dye (1 part) were prepared Thus, a composition containing hydroxyethylcellulose 2.0, Me<sub>2</sub>CHOH 20.0, BuOH 7.0, water 69.0, and Naphthalene Fast Orange 2GS [1936-15-8] 1 part was adjusted to a pH 3.0 to give a shampoo which was useful in dyeing white hair when applied at 30° for 30-40 min.

IT 523-44-4 1320-07-6  
(hair dyeing shampoo compns. containing)

RN 523-44-4 HCAPLUS

CN Benzenesulfonic acid, 4-[(4-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)



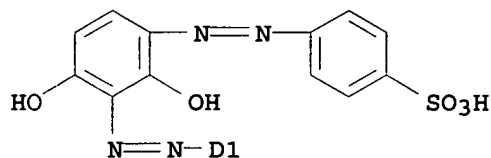
● Na

RN 1320-07-6 HCAPLUS

CN Benzenesulfonic acid, 4-[[3-[(dimethylphenyl)azo]-2,4-dihydroxyphenyl]azo]-, monosodium salt (9CI) (CA INDEX NAME)



2 ( D1-Me )



● Na

IC A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 81-88-9 523-44-4 1064-48-8 1320-07-6  
 1658-56-6 1936-15-8 6359-40-6 13011-65-9 17681-50-4  
 23279-70-1  
 (hair dyeing shampoo compns.  
 containing)

L26 ANSWER 72 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 1976:8849 HCAPLUS  
 DOCUMENT NUMBER: 84:8849  
 TITLE: Hair dyeing  
 INVENTOR(S): Matsuo, Yoshikazu; Abeta, Sadaharu  
 PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 50107146	A2	19750823	JP 1974-15635	1974 0206

PRIORITY APPLN. INFO.: <-- JP 1974-15635 A 1974  
0206

GI For diagram(s), see printed CA Issue.  
 AB Hair was bleached with H2O2 followed by treatment with dyes at pH 3.5-6.5 and <60°. The treatment did not produce adverse effect on hair and skin, and the color was not removed after

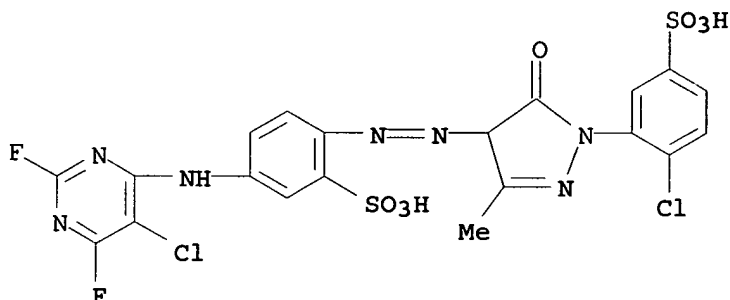


shampoo. Thus, hair was dyed with a preparation containing I [57358-29-9], II [57322-82-4], III [57322-83-5], citric acid, and locust bean paste after bleaching.

IT 35434-54-9 57322-80-2 72379-42-1  
(hair dye composition containing)

RN 35434-54-9 HCAPLUS

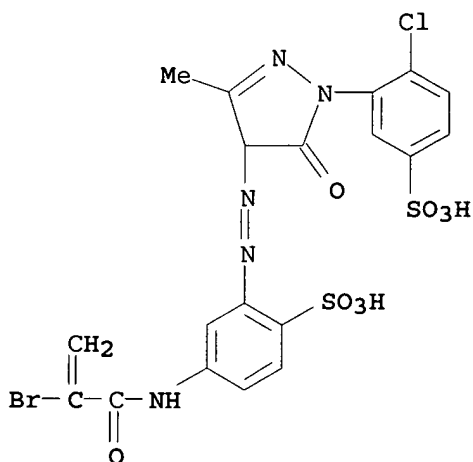
CN Benzenesulfonic acid, 5-[(5-chloro-2,6-difluoro-4-pyrimidinyl)amino]-2-[[1-(2-chloro-5-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

RN 57322-80-2 HCAPLUS

CN Benzenesulfonic acid, 4-[(2-bromo-1-oxo-2-propenyl)amino]-2-[[1-(2-chloro-5-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-, disodium salt (9CI) (CA INDEX NAME)

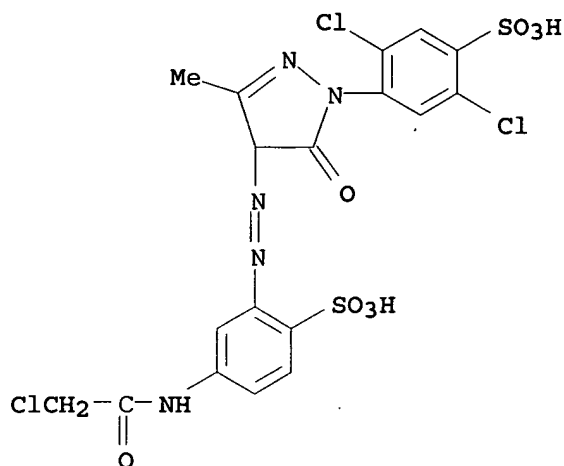


●2 Na

RN 72379-42-1 HCAPLUS

CN Benzenesulfonic acid, 4-[(chloroacetyl)amino]-2-[[1-(2,5-dichloro-

4-sulfohenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]-,  
disodium salt (9CI) (CA INDEX NAME)



●2 Na

IC A61K  
CC 62-3 (Essential Oils and **Cosmetics**)  
IT 35434-54-9 57322-78-8 57322-79-9 57322-80-2  
57322-81-3 57322-82-4 57322-83-5 57358-28-8  
72379-42-1  
(hair dye composition containing)

L26 ANSWER 73 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 1975:175139 HCAPLUS  
DOCUMENT NUMBER: 82:175139  
TITLE: Human hair dye  
INVENTOR(S): Leon, Nicholas H.; Swift, John A.  
PATENT ASSIGNEE(S): Unilever N. V.  
SOURCE: Ger. Offen., 18 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: **Patent**  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2310420	A1	19740919	DE 1973-2310420	1973 0302
PRIORITY APPLN. INFO.: <--				
			DE 1973-2310420	A 1973 0302
<--				

GI For diagram(s), see printed CA Issue.  
AB Dyes, which react with keratin fibers, with the general formula

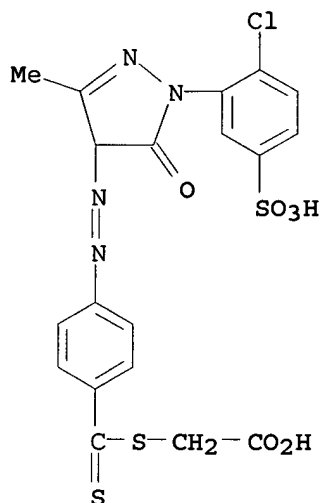
XCS2R, where x=chromophore group and R = R1CO2H, R1CO2Me, CH2CH2OH, or Me (R1=group with 1, 2, or 3 atoms), were prepared for use as human hair dyes. Keratin fibers were treated with a reducing agent to reduce the S-S bridge before or simultaneously with the dye. The most reactive dyes were Z-(N.tplbond.N+YCS2R) (I). An example of I was prepared by diazotization of II and coupling of the diazonium compound with 4-chloro-3-(3-methyl-5-oxo-2-pyrazoliny)benzenesulfonic acid to give a yellow dye number 2 [54996-44-0]. A dye composition contains 2-mercaptoethanol [60-24-2] 5, reddish-violet dye (7-amino-1-hydroxynaphthalene-3-sulfonic acid-diazotized II reaction product) number 4 [55196-66-2] 5, nonionic surfactant 1, and water to 100%.

IT 54996-44-0

(hair dye composition containing)

RN 54996-44-0 HCAPLUS

CN Acetic acid, [[[4-[[1-(2-chloro-5-sulfophenyl)-4,5-dihydro-3-methyl-5-oxo-1H-pyrazol-4-yl]azo]phenyl]thioxomethyl]thio]- (9CI)  
(CA INDEX NAME)



IC D06P; A61K

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 40

IT 54996-44-0 55196-66-2

(hair dye composition containing)

L26 ANSWER 74 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1964:439688 HCAPLUS

DOCUMENT NUMBER: 61:39688

ORIGINAL REFERENCE NO.: 61:6855d-e

TITLE: Hair dyeing composition

PATENT ASSIGNEE(S): Gillette Co.

SOURCE: 8 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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-----				

GB 959132

19640527

GB

BE 621044

BE

PRIORITY APPLN. INFO.:

US

1961

0804

&lt;--

AB Predictable and reproducible dyeing of hair is obtained by using  
in aqueous solution at pH 8.5-12.5, a composition containing one or more basic  
or

acid dyes, a salt (I), an alkali, a solvent (II), and H<sub>2</sub>O<sub>2</sub>. I, soluble in H<sub>2</sub>O in amts. not less than 0.1% by weight at 25°, is prepared from a uni- or bivalent cation, and if organic, does not have chains greater than C<sub>6</sub>. Complete miscibility could not be obtained from a mixture of I 1.4, II 4.0, and H<sub>2</sub>O 10 parts by weight, but equivalent amts. of the dye mixture is dissolved by II and aqueous phases when in contact for 3 hrs. at 25°. Thus, a composition (III) was prepared from D & C Brown Number 1 0.82, extract D & C Violet Number 2 0.09, extract D & C Red Number 13 0.09, PhCH<sub>2</sub>OH 8.0, Na<sub>2</sub>SO<sub>4</sub> 8.0, thickener 2.0, and NH<sub>4</sub>OH (28°Be.) 3.58 g. and diluted with H<sub>2</sub>O to 100 g. III (pH 9.4) was mixed with the same volume H<sub>2</sub>O<sub>2</sub> cream, applied to the hair for 15 min. at room temperature, and washed to give hair with a titian color.

IT 1320-07-6, C.I. Acid Orange 24

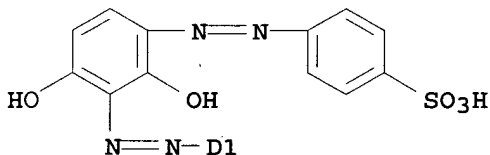
(hair dye compns. from, H<sub>2</sub>O<sub>2</sub>  
bleach-containing)

RN 1320-07-6 HCAPLUS

CN Benzenesulfonic acid, 4-[[3-[(dimethylphenyl)azo]-2,4-dihydroxyphenyl]azo]-, monosodium salt (9CI) (CA INDEX NAME)



2 ( D1-Me )



● Na

IC A61K

CC 29 (Essential Oils and Cosmetics)

IT 81-48-1, Anthraquinone, 1-hydroxy-4-p-toluidino- 1248-18-6, C.I.  
Pigment Red 49 1320-07-6, C.I. Acid Orange 24  
(hair dye compns. from, H<sub>2</sub>O<sub>2</sub>  
bleach-containing)

=&gt; d 11 all

L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2002:714119 HCAPLUS  
 DN 137:252663  
 ED Entered STN: 20 Sep 2002  
 TI Hair dyeing compositions comprising a ring-fused heterocycle  
 direct dyes  
 IN Pratt, Dominic; Kawagishi, Toshio  
 PA Kao Corporation, Japan; Fuji Photo Film Co., Ltd.  
 SO Eur. Pat. Appl., 28 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 28

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1240892	A2	20020918	EP 2002-5386	2002 0315
EP 1240892	A3	20040128		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
DE 10112436	A1	20021002	DE 2001-10112436	2001 0315
DE 10112436	C2	20030821		
DE 10114545	A1	20021219	DE 2001-10114545	2001 0324
DE 10114545	B4	20050113		
EP 1275367	A1	20030115	EP 2001-117774	2001 0801
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003024059	A1	20030206	US 2002-96669	2002 0314
US 6783558	B2	20040831		
JP 2003113055	A2	20030418	JP 2002-72373	2002 0315
EP 1398020	A1	20040317	EP 2002-20528	2002 0916
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2005015896	A1	20050127	US 2003-661609	2003 0915

EP 1398022                      A1            20040317            EP 2003-20523  
 2003  
 0916

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,  
 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,  
 EE, HU, SK

JP 2004107343                      A2            20040408            JP 2003-322462  
 2003  
 0916

PRAI DE 2001-10112436            A            20010315  
 DE 2001-10114545            A            20010324  
 JP 2001-231327            A            20010731  
 EP 2001-117774            A            20010801  
 EP 2001-115750            A            20010709  
 EP 2002-20528            A            20020916

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1240892	ICM	A61K007-13
EP 1240892	ECLA	A61K008/49F; A61Q005/10
DE 10112436	ECLA	A61K008/49F; A61Q005/10
DE 10114545	ECLA	A61K008/49F; A61Q005/10
EP 1275367	ECLA	A61K008/49F3; A61Q005/10
US 2003024059	NCL	008/405.000
	ECLA	A61K008/49F; A61Q005/10
EP 1398020	ECLA	A61K008/40; A61K008/49F; A61Q005/10
US 2005015896	NCL	008/405.000
	ECLA	A61K008/40; A61K008/49F; A61Q005/10
JP 2004107343	FTERM	4C083/AB082; 4C083/AB412; 4C083/AC152; 4C083/AC511; 4C083/AC551; 4C083/AC641; 4C083/AC761; 4C083/AC762; 4C083/AC782; 4C083/AC851; 4C083/AC852; 4C083/AC861; 4C083/BB21; 4C083/BB24; 4C083/BB43; 4C083/BB53; 4C083/CC36; 4C083/DD23; 4C083/DD27; 4C083/EE01; 4C083/EE07; 4C083/EE26; 4H057/AA01; 4H057/AA02; 4H057/BA24; 4H057/DA01; 4H057/DA21

OS MARPAT 137:252663

AB The present invention is directed to a hair coloring method by using a composition and to the composition comprising a specified ring-fused heterocycle direct dye (e.g., a pyrazolotriazole). This composition has a surprisingly good hair coloring performance and compatibility with peroxides. The use of this composition leads to long lasting brilliant colors, wherein the color is stable against washing of the hair and environmental influences. 3-Methyl-6-phenyl-1 H-pyrazolo[5,1-c][1,2,4]triazole (0.5g) was dissolved in water and allowed to react with 4-amino-2,6-dichlorophenol in the presence of potassium persulfate to give a pyrazolotriazole direct dye. A formulation contained the above dye 0.01, benzyl alc. 0.5 ammonia up to pH 10, and water up to 10 g. The composition imparted a bright vivid magenta color to white goat hair.

ST hair dye direct pyrazolotriazole prepn; ring fused heterocycle direct dye hair prepn

IT Dyes  
 (direct; hair dyeing compns. comprising ring-fused heterocycle direct dyes)

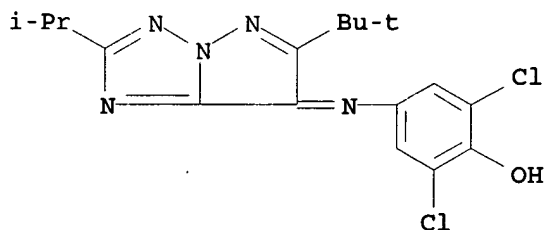
IT Hair preparations  
 (dyes, oxidative; hair dyeing compns. comprising ring-fused

heterocycle direct dyes)  
 IT Hair preparations  
   (dyes; hair dyeing compns. comprising ring-fused heterocycle  
   direct dyes)  
 IT Hair  
   Human  
     (hair dyeing compns. comprising ring-fused heterocycle direct  
     dyes)  
 IT 163921-17-3 459425-56-0 460988-77-6 460988-78-7  
   460988-79-8 460988-80-1 460988-81-2 460988-82-3  
   460988-83-4 460988-84-5  
     (hair dyeing compns. comprising ring-fused heterocycle direct  
     dyes)  
 IT 448235-46-9P 448235-48-1P 460988-76-5P  
   (hair dyeing compns. comprising ring-fused heterocycle direct  
   dyes)  
 IT 5930-28-9 66348-57-0 101948-27-0 448235-49-2  
   (hair dyeing compns. comprising ring-fused heterocycle direct  
   dyes)

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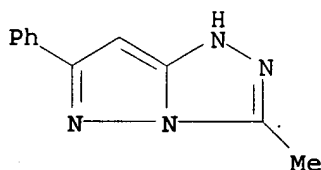
L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 2,6-dichloro-4-[[6-(1,1-dimethylethyl)-2-(1-methylethyl)-  
   7H-pyrazolo[1,5-b][1,2,4]triazol-7-ylidene]amino]- (9CI)  
 MF C17 H19 Cl2 N5 O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

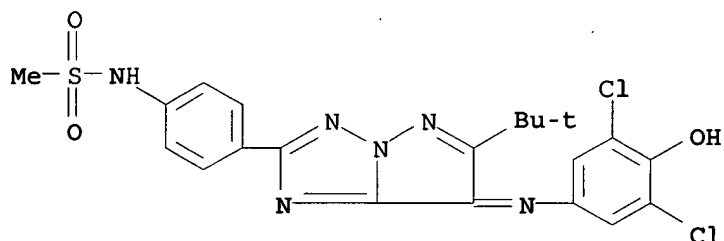
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):16

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN 1H-Pyrazolo[5,1-c]-1,2,4-triazole, 3-methyl-6-phenyl- (9CI)  
 MF C11 H10 N4



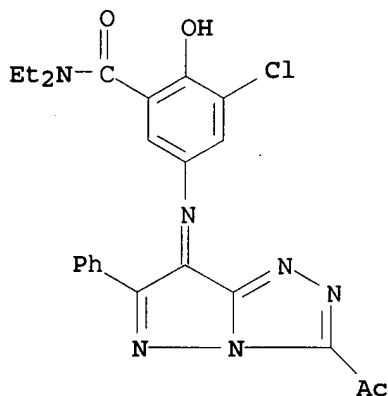
## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Methanesulfonamide, N-[4-[7-[(3,5-dichloro-4-hydroxyphenyl)imino]-  
 6-(1,1-dimethylethyl)-7H-pyrazolo[1,5-b][1,2,4]triazol-2-  
 yl]phenyl]- (9CI)  
 MF C21 H20 Cl2 N6 O3 S



## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Benzamide, 5-[(3-acetyl-6-phenyl-7H-pyrazolo[5,1-c]-1,2,4-triazol-  
 7-ylidene)amino]-3-chloro-N,N-diethyl-2-hydroxy- (9CI)  
 MF C23 H21 Cl N6 O3

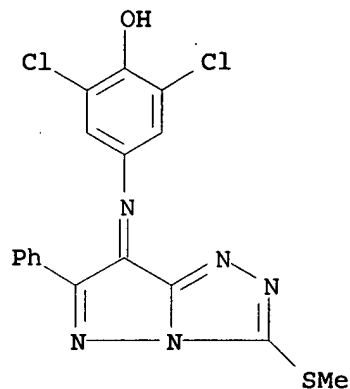


## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 2,6-dichloro-4-[[3-(methylthio)-6-phenyl-7H-pyrazolo[5,1-  
 c]-1,2,4-triazol-7-ylidene]amino]- (9CI)

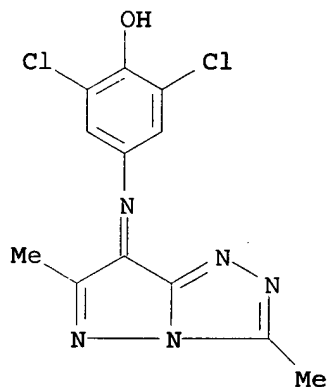


MF C17 H11 Cl2 N5 O S



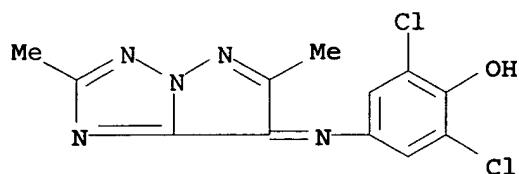
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 2,6-dichloro-4-[(3,6-dimethyl-7H-pyrazolo[5,1-c]-1,2,4-triazol-7-ylidene)amino]- (9CI)  
 MF C12 H9 Cl2 N5 O



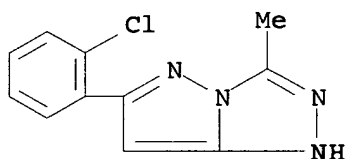
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 2,6-dichloro-4-[(2,6-dimethyl-7H-pyrazolo[1,5-b][1,2,4]triazol-7-ylidene)amino]- (9CI)  
 MF C12 H9 Cl2 N5 O



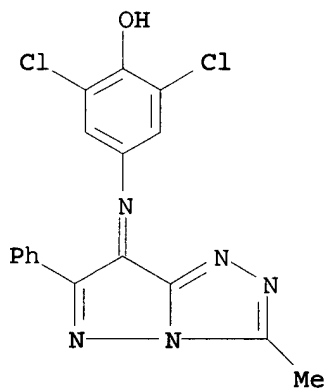
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN 1H-Pyrazolo[5,1-c]-1,2,4-triazole, 6-(2-chlorophenyl)-3-methyl-  
 (9CI)  
 MF C11 H9 Cl N4



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

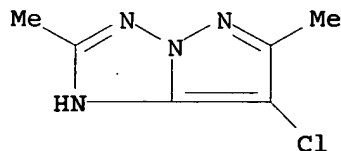
L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 2,6-dichloro-4-[(3-methyl-6-phenyl-7H-pyrazolo[5,1-c]-  
 1,2,4-triazol-7-ylidene)amino]- (9CI)  
 MF C17 H11 Cl2 N5 O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

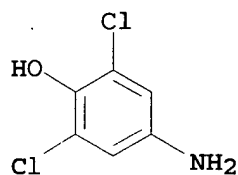
L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN 1H-Pyrazolo[1,5-b][1,2,4]triazole, 7-chloro-2,6-dimethyl- (9CI)  
 MF C6 H7 Cl N4

CI COM



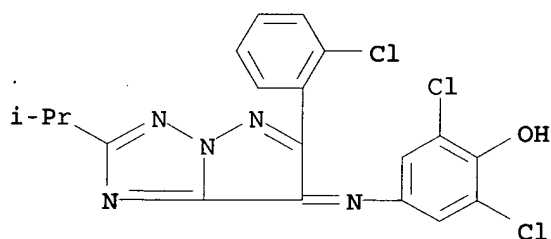
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 4-amino-2,6-dichloro- (6CI, 7CI, 8CI, 9CI)  
 MF C6 H5 Cl2 N O  
 CI COM



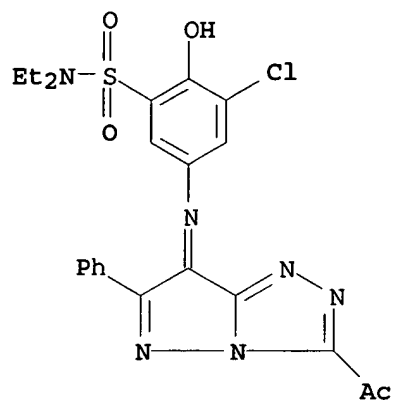
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 2,6-dichloro-4-[[6-(2-chlorophenyl)-2-(1-methylethyl)-7H-pyrazolo[1,5-b][1,2,4]triazol-7-ylidene]amino]- (9CI)  
 MF C19 H14 Cl3 N5 O



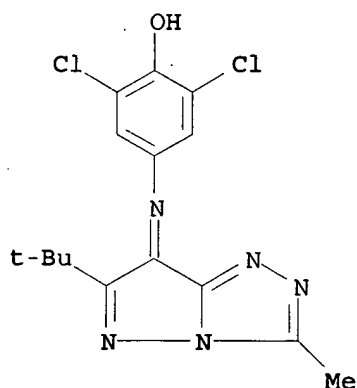
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Benzenesulfonamide, 5-[(3-acetyl-6-phenyl-7H-pyrazolo[5,1-c]-1,2,4-triazol-7-ylidene)amino]-3-chloro-N,N-diethyl-2-hydroxy- (9CI)  
 MF C22 H21 Cl N6 O4 S



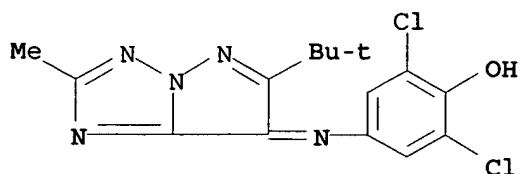
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 2,6-dichloro-4-[[6-(1,1-dimethylethyl)-3-methyl-7H-  
 pyrazolo[5,1-c]-1,2,4-triazol-7-ylidene]amino] - (9CI)  
 MF C15 H15 Cl2 N5 O



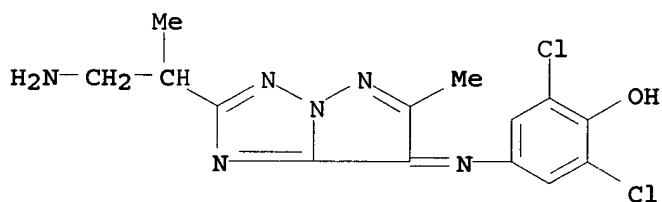
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 2,6-dichloro-4-[[6-(1,1-dimethylethyl)-2-methyl-7H-  
 pyrazolo[1,5-b]-1,2,4-triazol-7-ylidene]amino] - (9CI)  
 MF C15 H15 Cl2 N5 O



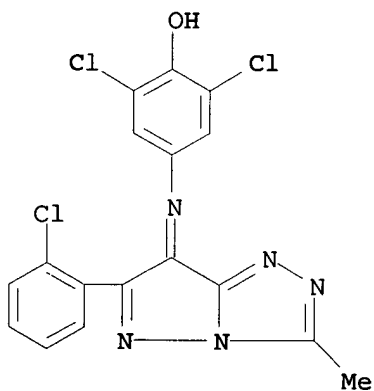
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 4-[[2-(2-amino-1-methylethyl)-6-methyl-7H-pyrazolo[1,5-  
 b][1,2,4]triazol-7-ylidene]amino]-2,6-dichloro- (9CI)  
 MF C14 H14 Cl2 N6 O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

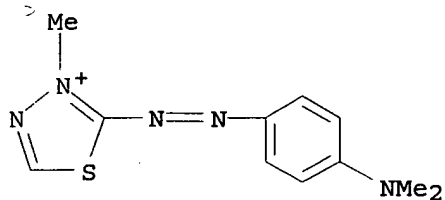
L2 17 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN  
 IN Phenol, 2,6-dichloro-4-[[6-(2-chlorophenyl)-3-methyl-7H-  
 pyrazolo[5,1-c]-1,2,4-triazol-7-ylidene]amino]- (9CI)  
 MF C17 H10 Cl3 N5 O



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED





CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

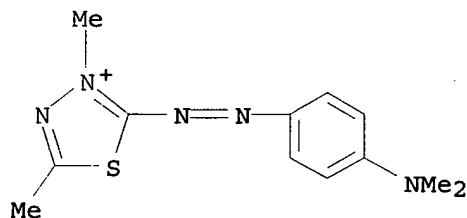
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

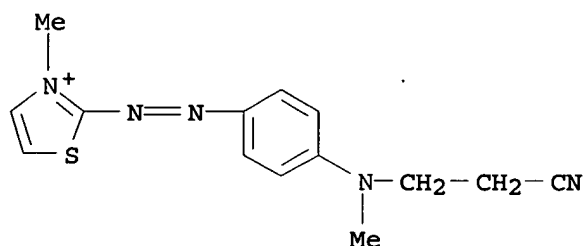
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CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

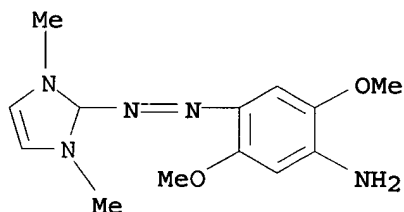
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

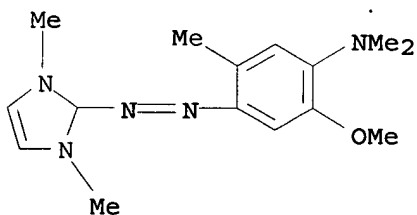
CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-47-1 HCAPLUS

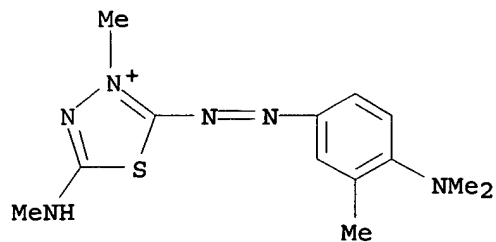
CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)



CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

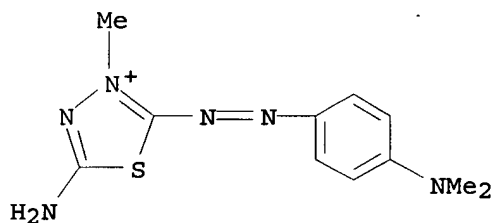
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



CM 2

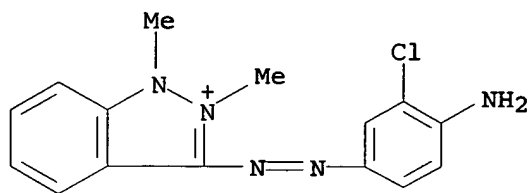
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

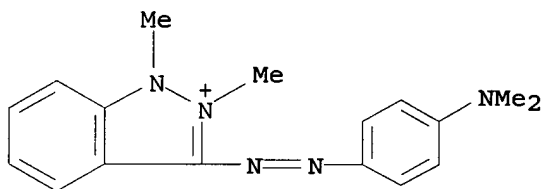
RN 167382-87-8 HCAPLUS

CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



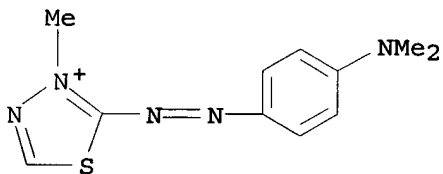
● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS  
 CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



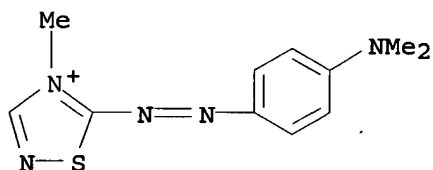
● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



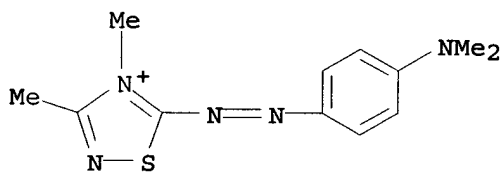
● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

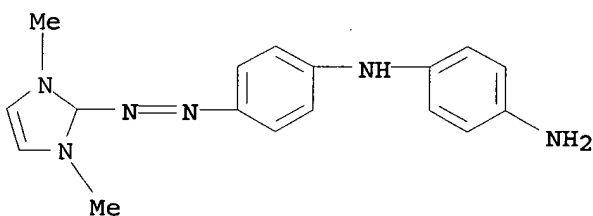
RN 167382-99-2 HCAPLUS

CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS

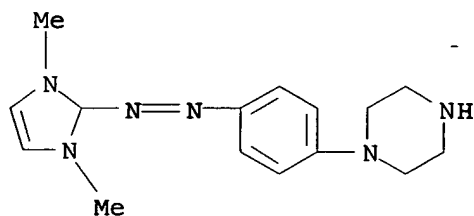
CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

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 41338-82-3 41338-83-4 41338-98-1 41339-00-8  
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287103-78-0 287104-37-4

(keratin dye compns. containing  
arianor dyes and addnl. cationic dye materials)

L26 ANSWER 43 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2000:161104 HCAPLUS  
DOCUMENT NUMBER: 132:198855  
TITLE: Hair dye composition containing direct  
cationic dyes and a silicone  
INVENTOR(S): Rondeau, Christine; Lang, Gerard; Cotteret,  
Jean  
PATENT ASSIGNEE(S): L'oreal, Fr.  
SOURCE: PCT Int. Appl., 121 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000012057	A1	20000309	WO 1999-FR1876	1999 0729
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## OTHER SOURCE(S): MARPAT 132:198855

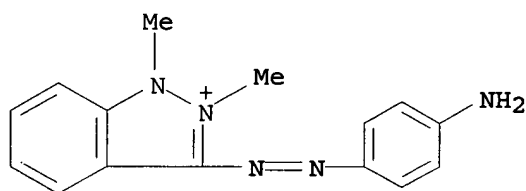
AB A dye composition for keratinous fibers, in particular human keratinous fibers such as hair, comprises in an appropriate dyeing medium, at least a direct cationic dye of specific formula, and characterized in that it further contains at least a silicone selected among amine-containing silicones, polyalkylene silicones, silicone gums and resins. A hair dye preparation contained 2-(p-dimethylaminophenylazo)-1,3-dimethylimidazolium chloride 0.10, 2-(p-aminophenylazo)-1,3-dimethylimidazolium chloride 0.1, ethoxylated nonylphenol 8.0, Q 2-8220 (amino-containing polydimethylsiloxane) 1.2, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100 %. The composition is applied on the hair for 30 min, then it is rinsed, washed with a shampoo, and dried to obtain a strong orange-red color.

IT 6687-56-5 7267-43-8 41338-82-3  
 41338-83-4 54940-81-7 62163-15-9  
 73447-48-0 75655-00-4 77061-58-6  
 83950-26-9 89923-52-4 97404-02-9  
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 161329-45-9 161329-47-1 161329-49-3  
 167382-87-8 167382-88-9 167382-97-0  
 167382-98-1 167382-99-2 178822-03-2  
 178822-05-4 259545-97-6

(hair dye composition containing direct  
 cationic dyes and silicone)

RN 6687-56-5 HCAPLUS  
 CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
 (9CI) (CA INDEX NAME)

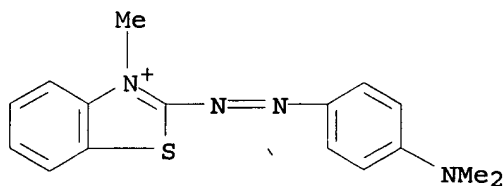


● Cl<sup>-</sup>

RN 7267-43-8 HCAPLUS  
 CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 perchlorate (9CI) (CA INDEX NAME)

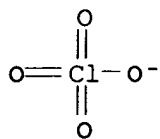
CM 1

CRN 38901-86-9  
 CMF C16 H17 N4 S



CM 2

CRN 14797-73-0  
 CMF Cl O4



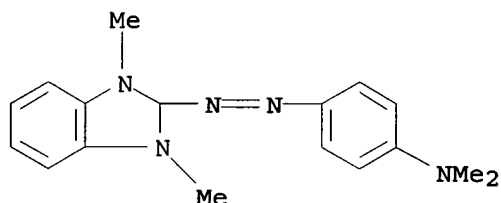
RN 41338-82-3 HCAPLUS

CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 49873-03-2

CMF C17 H20 N5

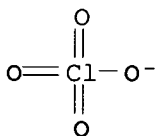


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

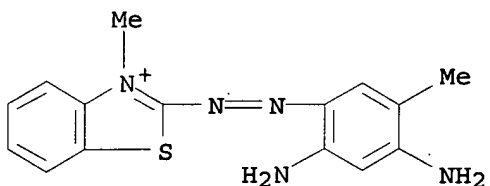
CRN 14797-73-0

CMF Cl O4



RN 41338-83-4 HCAPLUS

CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-, iodide (9CI) (CA INDEX NAME)

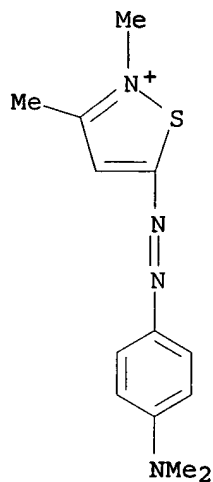


● I<sup>-</sup>



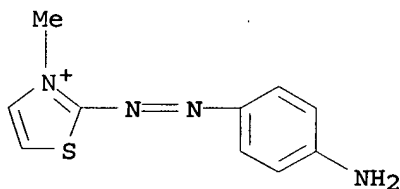
RN 54940-81-7 HCAPLUS

CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

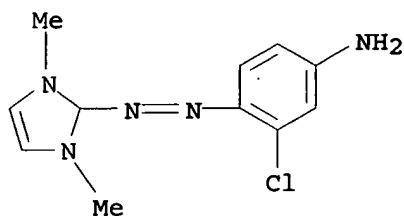
RN 62163-15-9 HCAPLUS

CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 73447-48-0 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

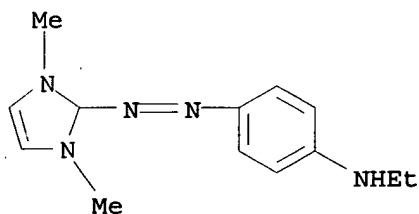


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

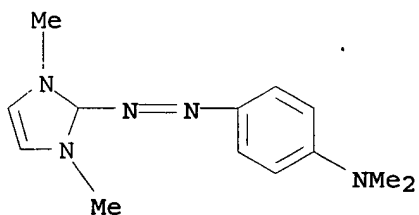


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

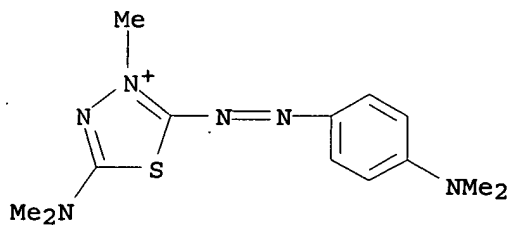
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S



CM 2

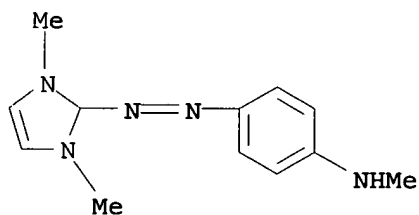
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS

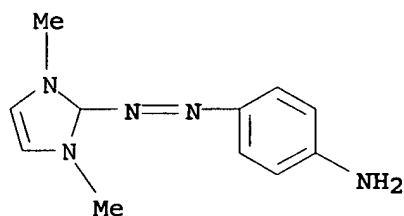
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

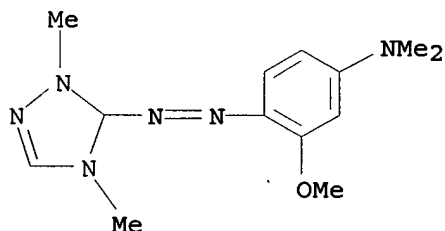


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

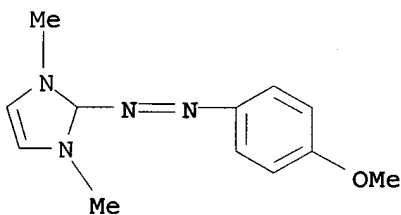


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

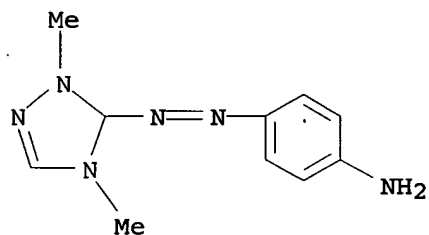


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

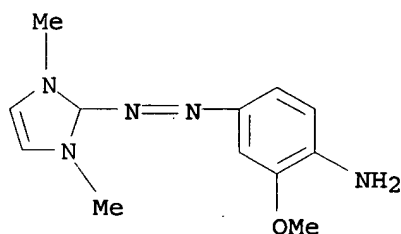


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

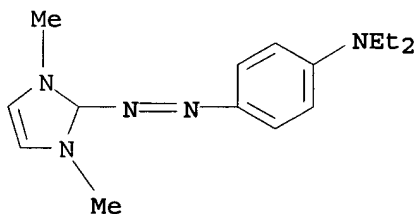


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

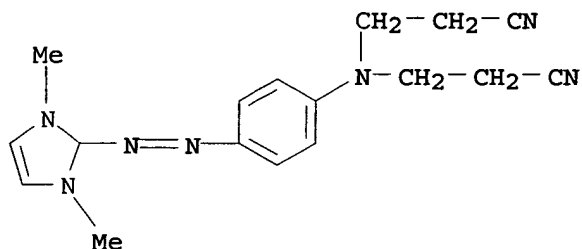


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

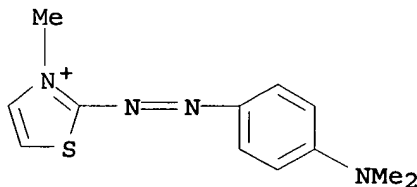


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

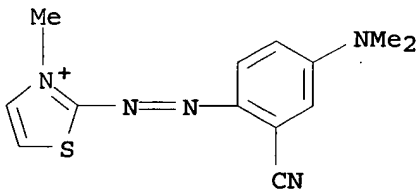
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

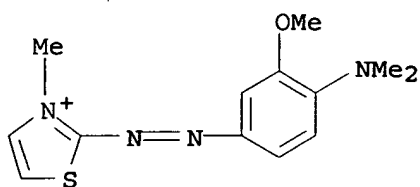
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

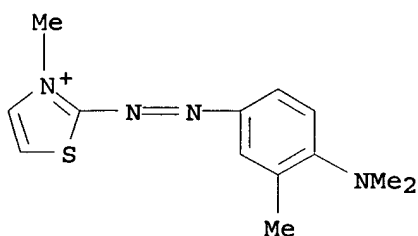
RN 161329-17-5 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



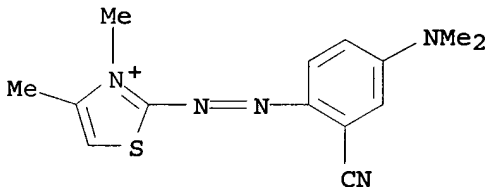
● Cl<sup>-</sup>

RN 161329-18-6 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



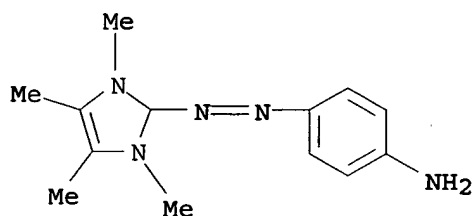
● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS  
 CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-,  
 chloride (9CI) (CA INDEX NAME)

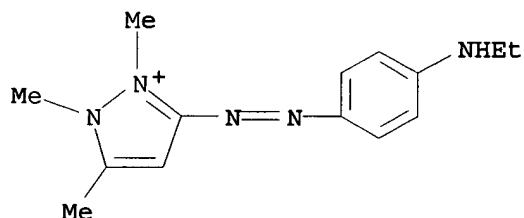


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-25-5 HCAPLUS

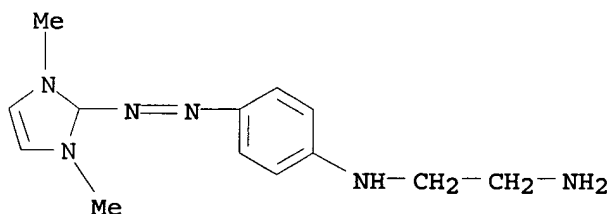
CN 1H-Pyrazolium, 3-[[4-(ethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



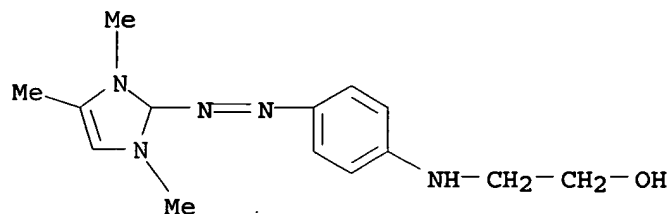
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)



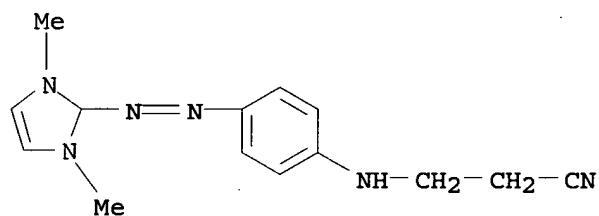


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

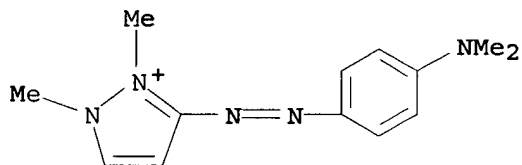


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-30-2 HCAPLUS

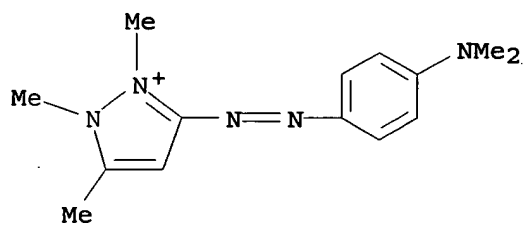
CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

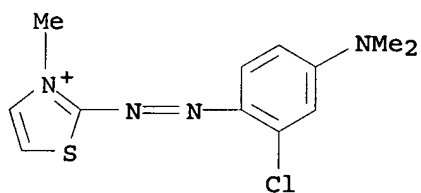
RN 161329-35-7 HCAPLUS

CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6

CMF C12 H14 Cl N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

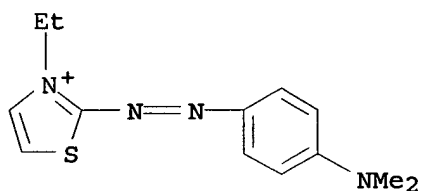
RN 161329-37-9 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

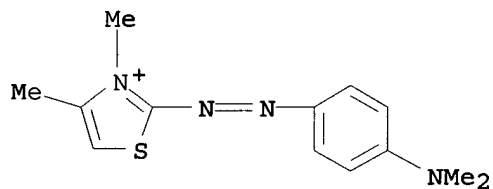
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

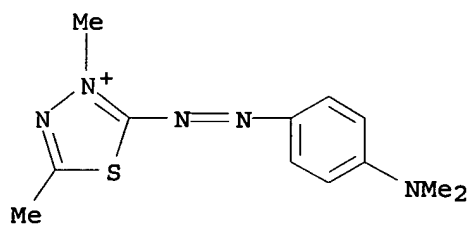
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

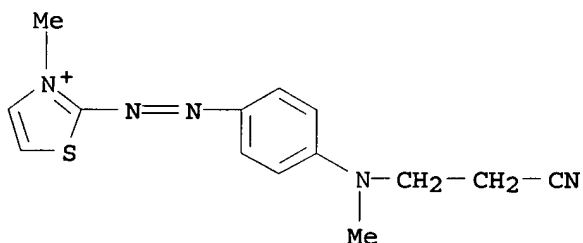
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

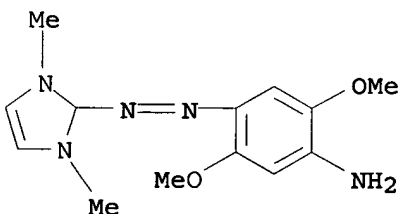
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

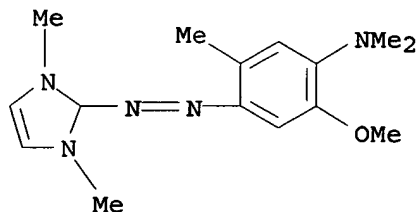
CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

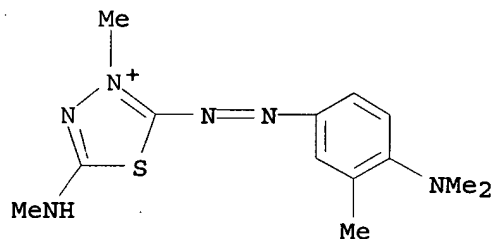
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me<sup>-</sup> O<sup>-</sup> SO<sub>3</sub><sup>-</sup>

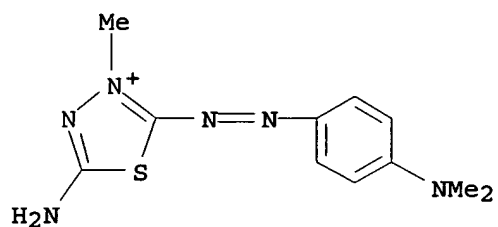
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



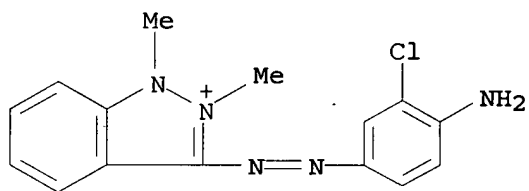
CM 2

CRN 21228-90-0

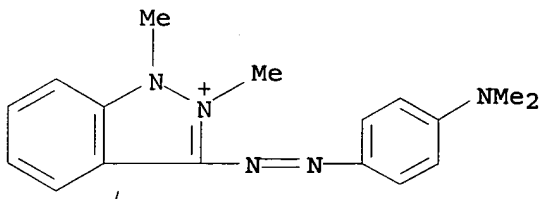
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

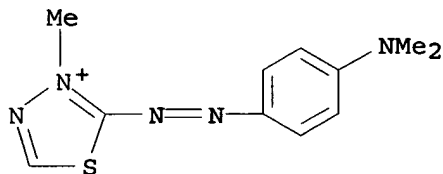
RN 167382-87-8 HCAPLUS

CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

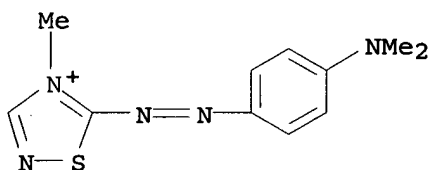
RN 167382-88-9 HCAPLUS

CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

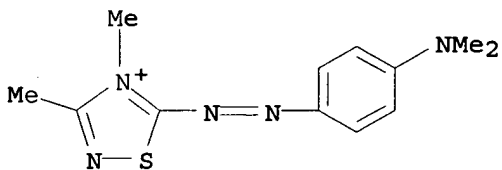
RN 167382-97-0 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS

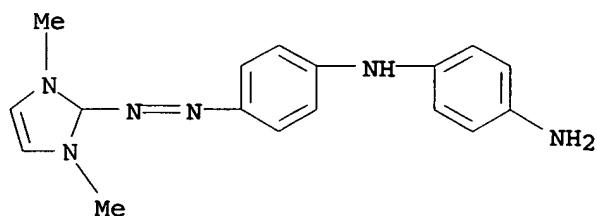
CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS

CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

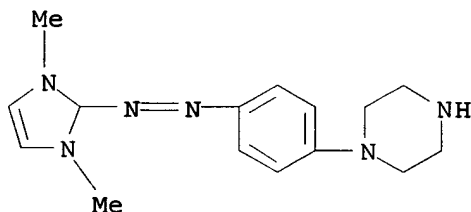


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

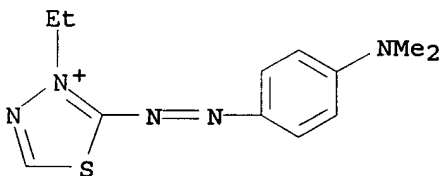
RN 259545-97-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 259545-96-5

CMF C12 H16 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S



Me-O-SO<sub>3</sub><sup>-</sup>

IC ICM A61K007-13  
CC 62-3 (Essential Oils and Cosmetics)  
IT 95-55-6D, derivs. 106-50-3D, 1,4-Benzenediamine, derivs.,  
biological studies 108-45-2D, 1,3-Benzenediamine, derivs.,  
biological studies 123-30-8D, derivs. 591-27-5D, derivs.  
6687-56-5 7077-55-6 7267-43-8 7687-09-4  
7687-11-8 26983-52-8D, Diphenol, derivs. 39838-87-4  
41338-82-3 41338-83-4 41338-95-8 41338-98-1  
41339-00-8 42476-20-0 51473-40-6 51473-50-8 52132-00-0  
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251352-55-3 259545-97-6

(hair dye composition containing direct  
cationic dyes and silicone)

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L26 ANSWER 44 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:144696 HCAPLUS

DOCUMENT NUMBER: 132:185244

TITLE: Hair dye composition containing direct

INVENTOR(S): cationic dyes and non-ionic surfactants  
 PATENT ASSIGNEE(S): Lang, Gerard; Cotteret, Jean  
 SOURCE: L'Oreal, Fr.  
 PCT Int. Appl., 115 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010519	A1	20000302	WO 1999-FR1875	1999 0729
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2782452	A1	20000225	FR 1998-10659	1998 0824
FR 2782452	B1	20011116		
CA 2305498	AA	20000302	CA 1999-2305498	1999 0729
AU 9950461	A1	20000314	AU 1999-50461	1999 0729
AU 739715	B2	20011018		
BR 9906737	A	20000815	BR 1999-6737	1999 0729
EP 1047389	A1	20001102	EP 1999-934809	1999 0729
EP 1047389	B1	20040707		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002523346	T2	20020730	JP 2000-565842	1999 0729
RU 2200538	C2	20030320	RU 2000-112879	1999 0729
AT 270541	E	20040715	AT 1999-934809	

1999  
0729

PT 1047389 T 20041130 PT 1999-934809

1999  
0729

ES 2224683 T3 20050301 ES 1999-934809

1999  
0729

ZA 2000001563 A 20001115 ZA 2000-1563

2000  
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PRIORITY APPLN. INFO.:

FR 1998-10659

A

1998  
0824

WO 1999-FR1875

W

1999  
0729

OTHER SOURCE(S): MARPAT 132:185244

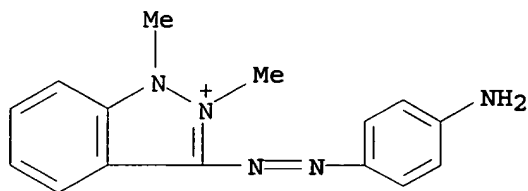
AB A dye composition for keratinous fibers, in particular human keratinous fibers such as hair, comprises in an appropriate dyeing medium, at least a direct cationic dye of specific formula, and characterized in that it further contains at least a non-ionic surfactants, such as alkylpolyglucosides. A hair dye preparation contained 2-(p-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.12, N-decanoyl-N-Me glucamine 8.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100 %. The composition is applied on the hair for 30 min, then it is rinsed, washed with a shampoo, and dried to obtain a strong red color.

IT 6687-56-5 7267-43-8 41338-82-3  
41338-83-4 54940-81-7 62163-15-9  
73447-48-0 75655-00-4 77061-58-6  
83950-26-9 89923-52-4 97404-02-9  
109220-25-9 161328-92-3 161329-06-2  
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161329-45-9 161329-47-1 161329-49-3  
167382-87-8 167382-88-9 167382-97-0  
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178822-05-4 259545-97-6

(hair dye composition containing direct  
cationic dyes and non-ionic surfactants)

RN 6687-56-5 HCAPLUS

CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
(9CI) (CA INDEX NAME)

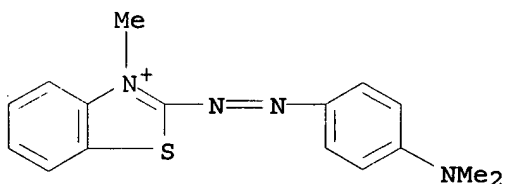


● Cl<sup>-</sup>

RN 7267-43-8 HCAPLUS  
 CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 perchlorate (9CI) (CA INDEX NAME)

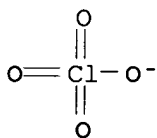
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CRN 38901-86-9  
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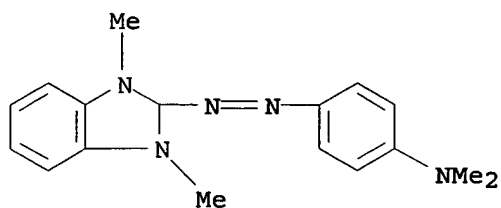
CRN 14797-73-0  
 CMF Cl O4



RN 41338-82-3 HCAPLUS  
 CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
 perchlorate (9CI) (CA INDEX NAME)

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CRN 49873-03-2  
 CMF C17 H20 N5

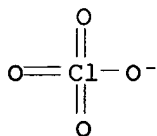


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

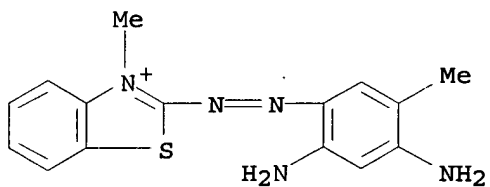
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CMF Cl O4



RN 41338-83-4 HCAPLUS

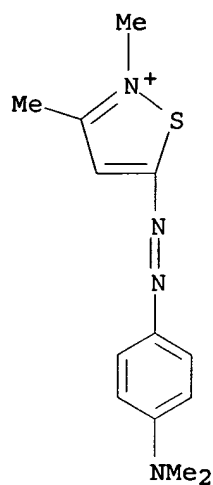
CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-,  
iodide (9CI) (CA INDEX NAME)



● I<sup>-</sup>

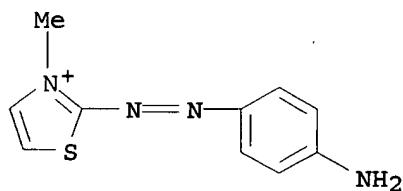
RN 54940-81-7 HCAPLUS

CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



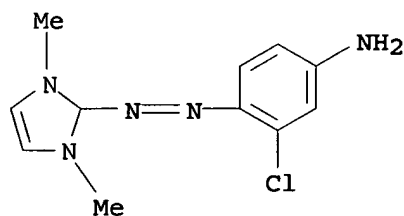
● Cl<sup>-</sup>

RN 62163-15-9 HCAPLUS  
 CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 73447-48-0 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

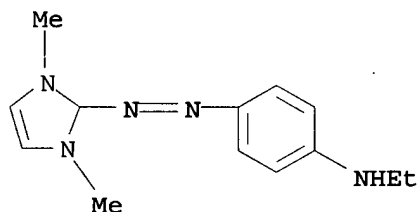


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

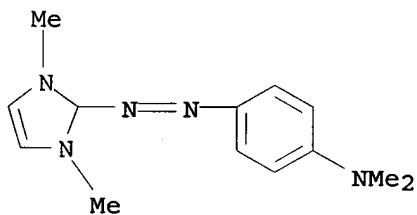


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

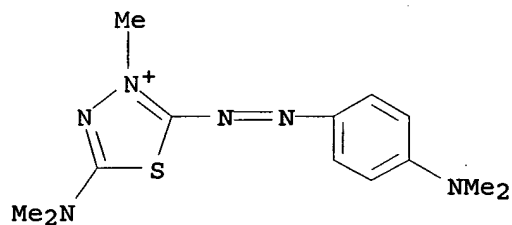
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S



CM 2

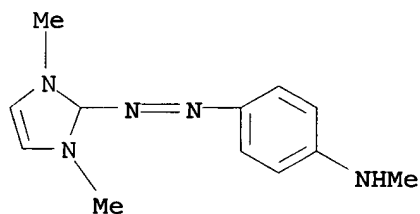
CRN 21228-90-0

CMF C H3 O4 S

Me--O--SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

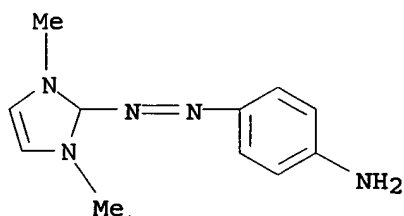
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



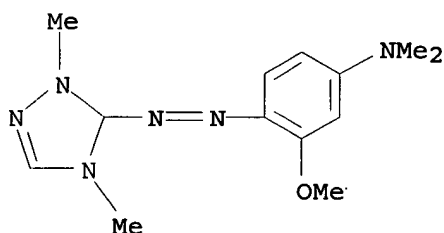


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

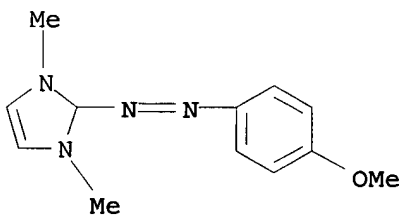


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

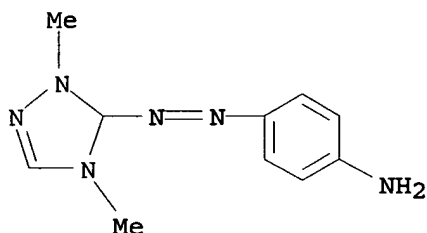


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

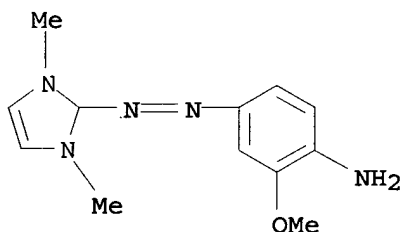


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

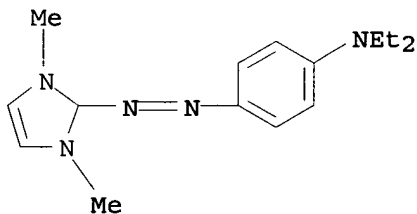


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

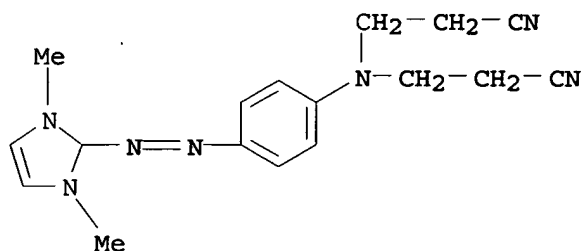


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

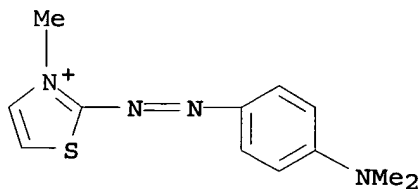


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

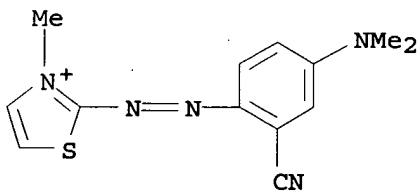
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

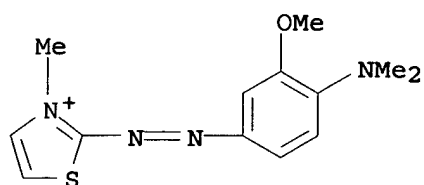
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

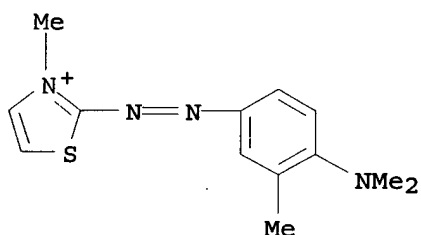
RN 161329-17-5 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



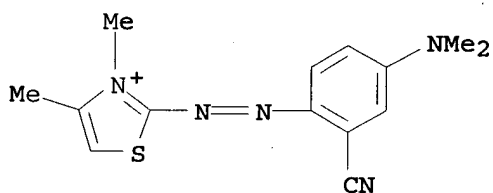
● Cl<sup>-</sup>

RN 161329-18-6 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



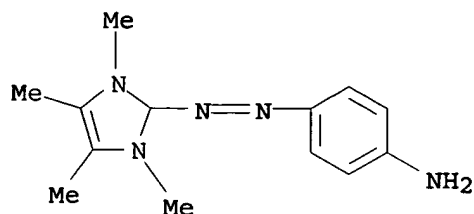
● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS  
 CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-,  
 chloride (9CI) (CA INDEX NAME)

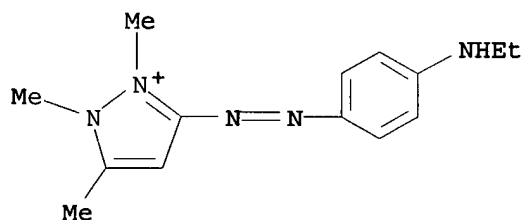


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-25-5 HCAPLUS

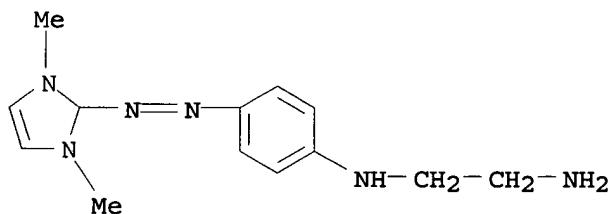
CN 1H-Pyrazolium, 3-[[4-(ethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

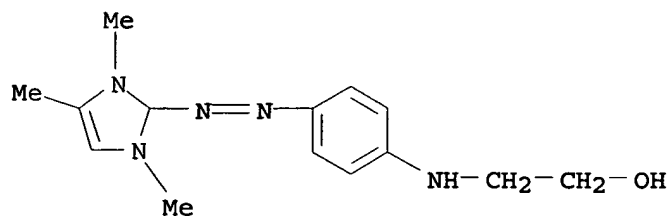


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

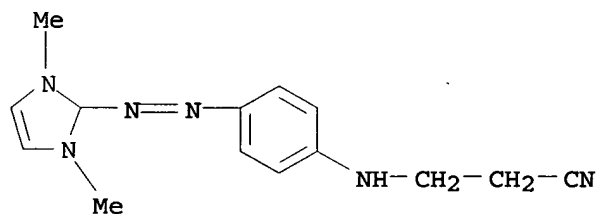


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

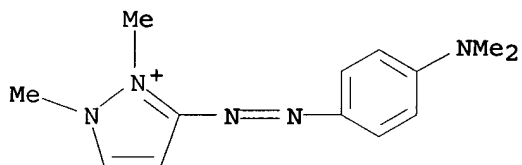


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

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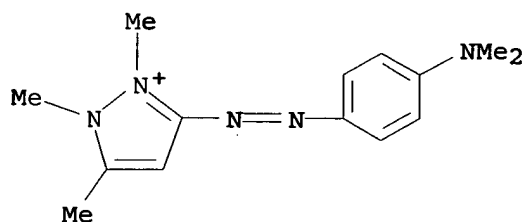
CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)

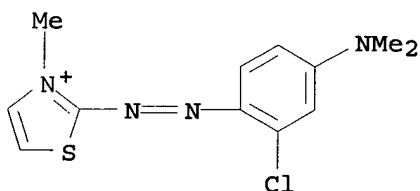


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
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CM 2

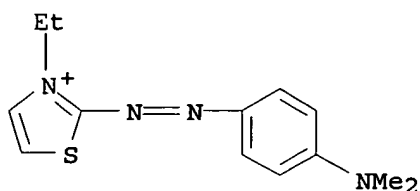
CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-37-9 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl  
 sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8  
 CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

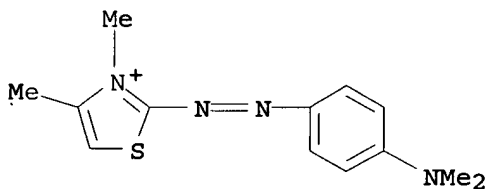
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-42-6 HCAPLUS

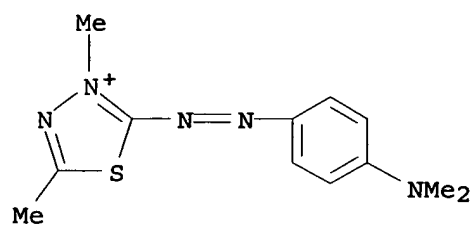
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CM 1

CRN 161329-41-5

CMF C12 H16 N5 S





CM 2

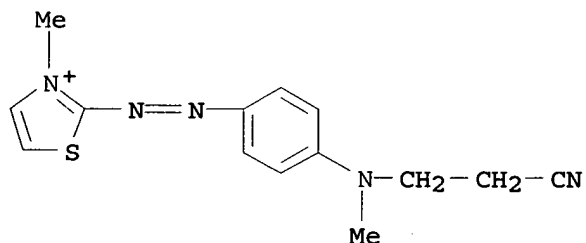
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CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

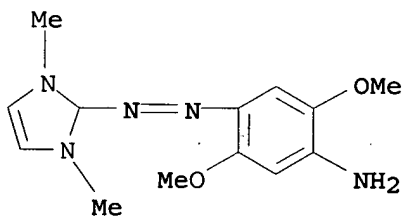
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

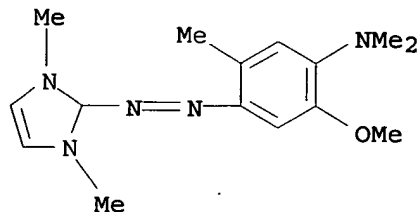
CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

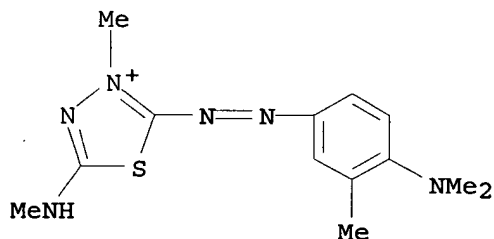
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

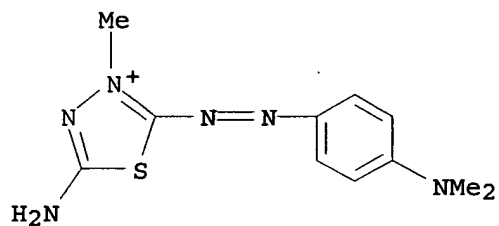
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



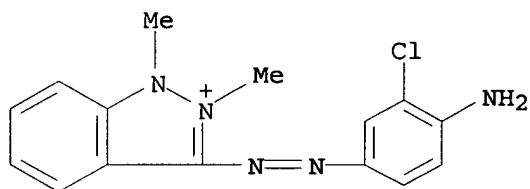
CM 2

CRN 21228-90-0

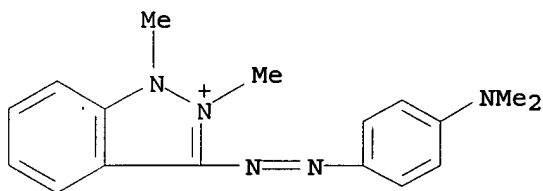
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

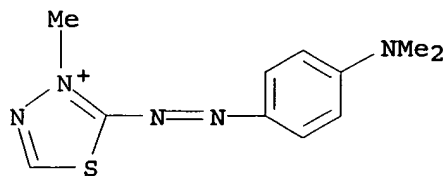
RN 167382-87-8 HCAPLUS

CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS

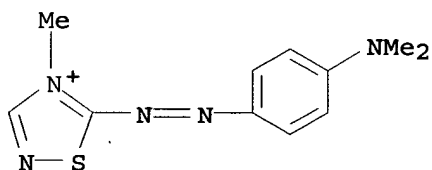
CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



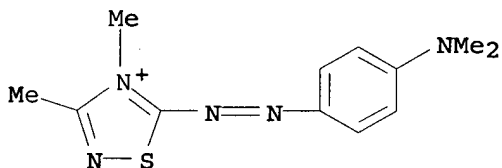
● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



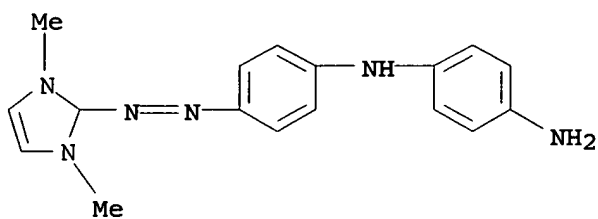
● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)

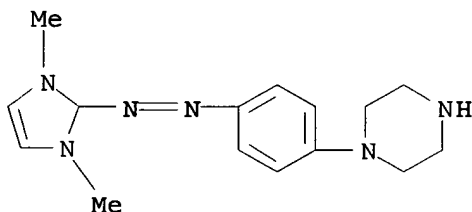


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

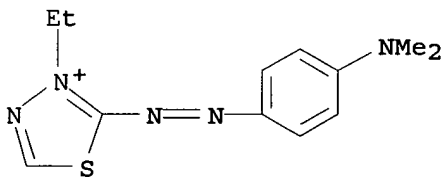
RN 259545-97-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 259545-96-5

CMF C12 H16 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

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 1,3-Benzenediamine, derivs., biological studies 123-30-8D,  
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 259545-97-6

(hair dye composition containing direct  
 cationic dyes and non-ionic surfactants)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 45 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2000:144695 HCAPLUS  
DOCUMENT NUMBER: 132:198846  
TITLE: Hair dye compositions containing direct  
cationic dyes and anionic surfactants  
INVENTOR(S): Lang, Gerard; Cotteret, Jean  
PATENT ASSIGNEE(S): L'Oreal, Fr.  
SOURCE: PCT Int. Appl., 112 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2000010518	A1	20000302	WO 1999-FR1866	1999 0728

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    ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
    LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO,
    RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US,
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY,
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FR 2782450          A1          20000225          FR 1998-10546

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EP 1047388      A1      20001102      EP 1999-934801      <--
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EP 1047388          B1      20040922
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JP 2002523345      T2      20020730      JP 2000-565841

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RU 2198651 C2 20030220 RU 2000-112411 <--

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AT 276727 E 20041015 AT 1999-934801

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ES 2229740 T3 20050416 ES 1999-934801

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US 6530959 B1 20030311 US 2000-529769

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US 2003172474 A1 20030918 US 2003-347870

2003  
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PRIORITY APPLN. INFO.:

FR 1998-10546 A  
1998  
0819

WO 1999-FR1866 W  
1999  
0728

US 2000-529769 A1  
2000  
0622

OTHER SOURCE(S): MARPAT 132:198846

AB A dye composition for keratinous fibers, in particular human keratinous fibers such as hair, comprises in an appropriate dyeing medium, at least a direct cationic dye of specific formula, and characterized in that it further contains at least an anionic surfactant, such as acylisethionates. A hair dye preparation contained 2-(p-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.20, triethanolamine cocoylglutamate 5.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100 %. The composition is applied on the hair for 30 min, then it is rinsed, washed with a shampoo, and dried to obtain a strong red color.

IT 6687-56-5 7267-43-8 41338-82-3  
41338-83-4 54940-81-7 62163-15-9  
73447-48-0 75655-00-4 77061-58-6  
83950-26-9 89923-52-4 97404-02-9  
109220-25-9 161328-92-3 161329-06-2  
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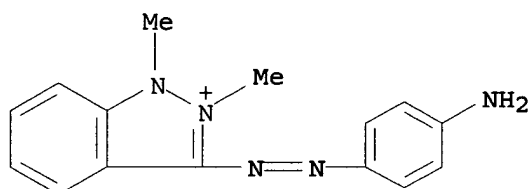


167382-97-0 167382-98-1 167382-99-2  
178822-03-2 178822-05-4

(hair dye compns. containing direct  
cationic dyes and anionic surfactants)

RN 6687-56-5 HCAPLUS

CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
(9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

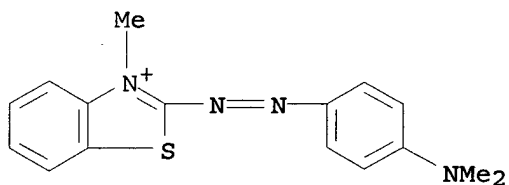
RN 7267-43-8 HCAPLUS

CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
perchlorate (9CI) (CA INDEX NAME)

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CRN 38901-86-9

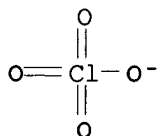
CMF C16 H17 N4 S



CM 2

CRN 14797-73-0

CMF Cl O4



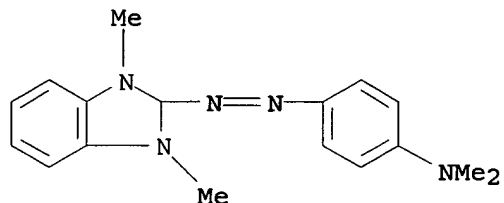
RN 41338-82-3 HCAPLUS

CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
perchlorate (9CI) (CA INDEX NAME)

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CRN 49873-03-2

CMF C17 H20 N5

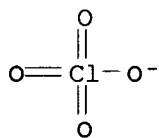


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

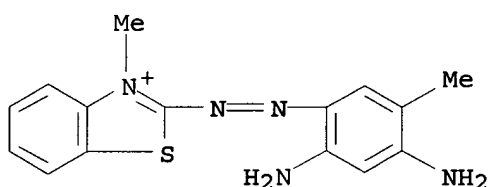
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CMF Cl O4



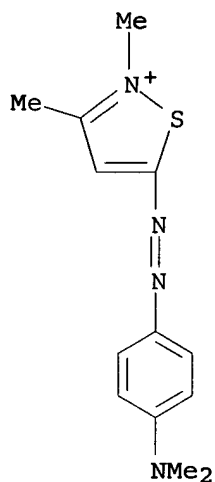
RN 41338-83-4 HCAPLUS

CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-, iodide (9CI) (CA INDEX NAME)

● I<sup>-</sup>

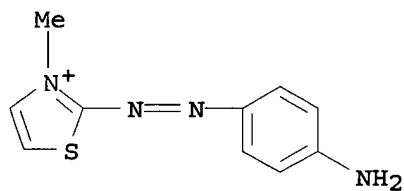
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CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



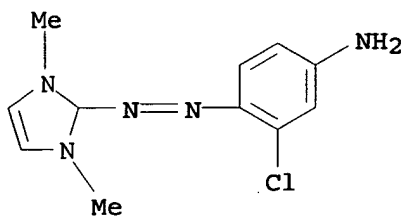
● Cl<sup>-</sup>

RN 62163-15-9 HCAPLUS  
 CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 73447-48-0 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

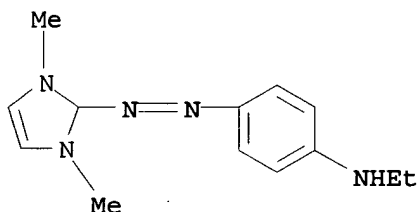


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

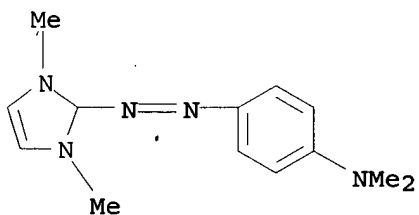


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

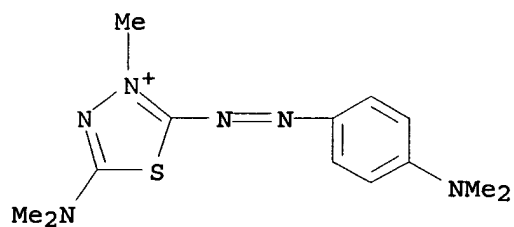
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S



CM 2

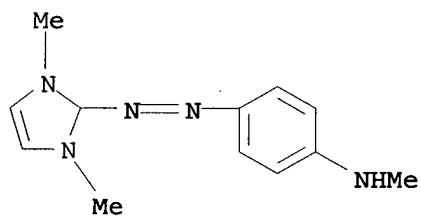
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS

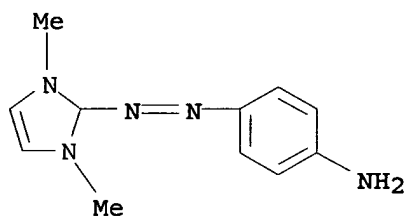
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

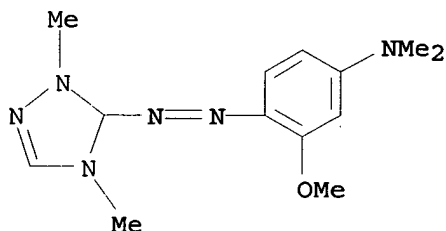


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

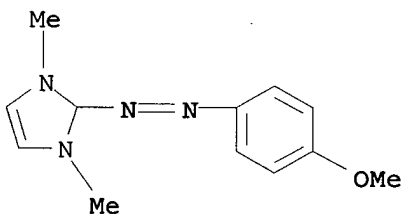


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

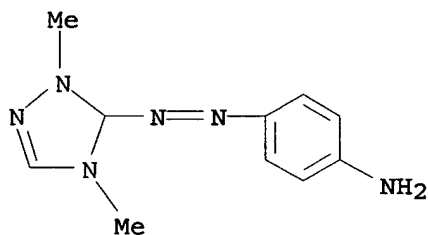


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

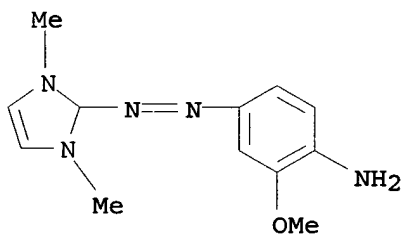


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

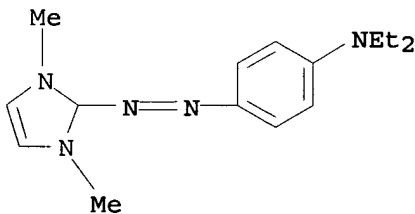


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

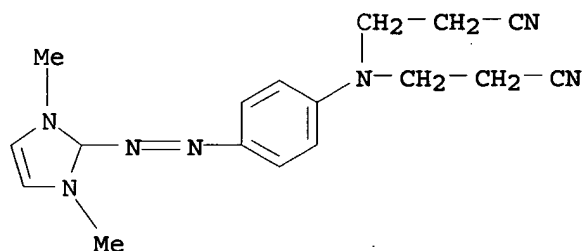


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

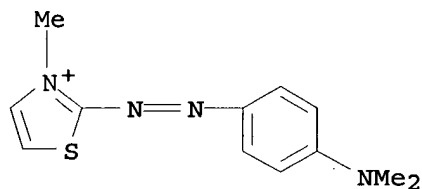


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

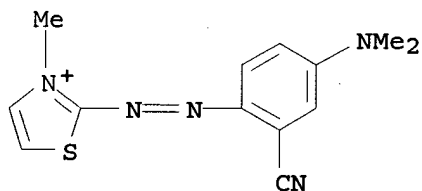
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

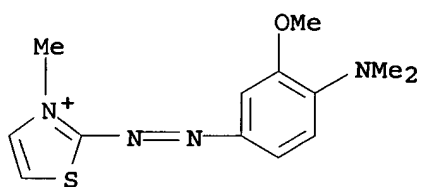


● Cl<sup>-</sup>

RN 161329-17-5 HCAPLUS

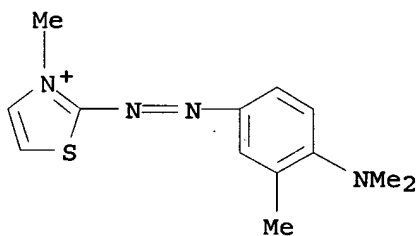
CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)





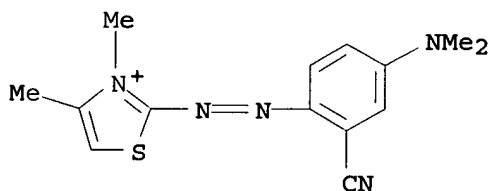
● Cl<sup>-</sup>

RN 161329-18-6 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



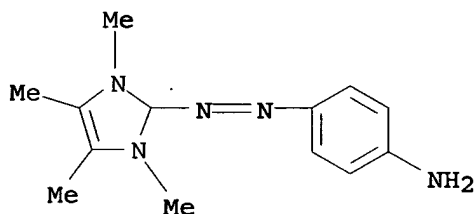
● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS  
 CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-,  
 chloride (9CI) (CA INDEX NAME)

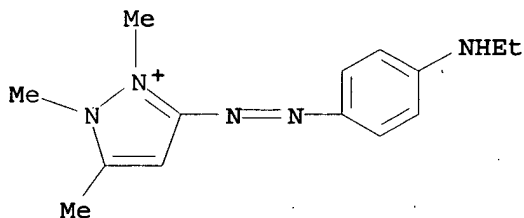


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-25-5 HCAPLUS

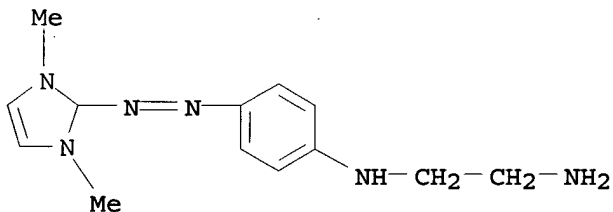
CN 1H-Pyrazolium, 3-[[4-(ethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

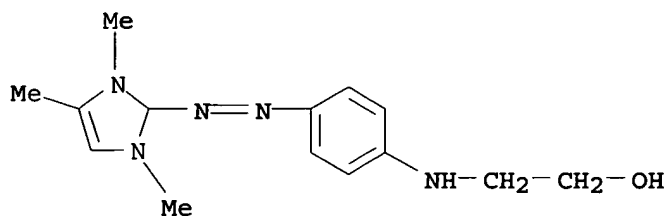


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

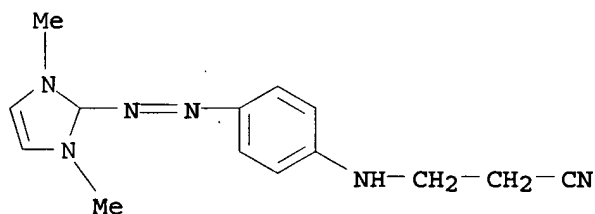
CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

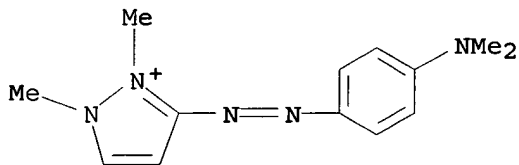
CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

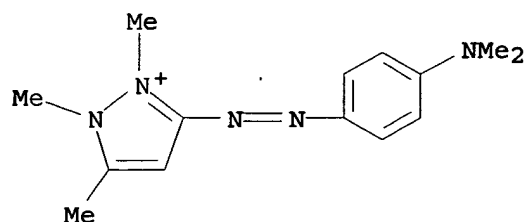
RN 161329-30-2 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)

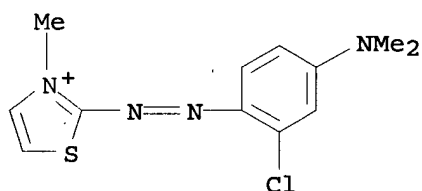


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

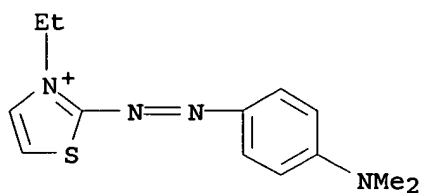
CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-37-9 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl  
 sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8  
 CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

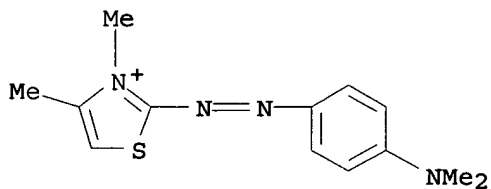
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

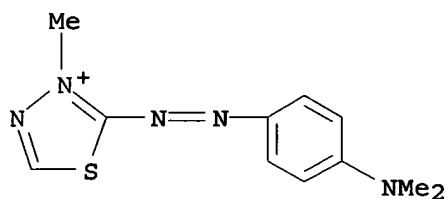
RN 161329-40-4 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

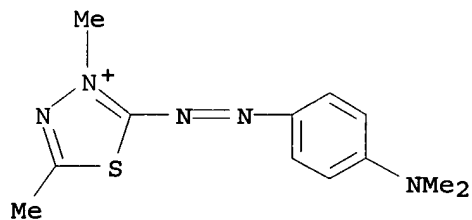
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

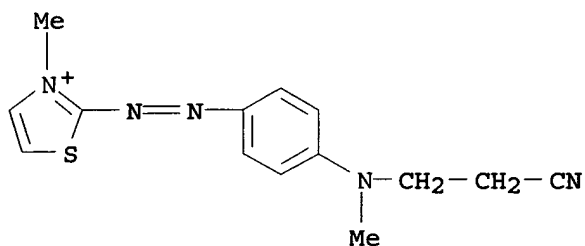
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

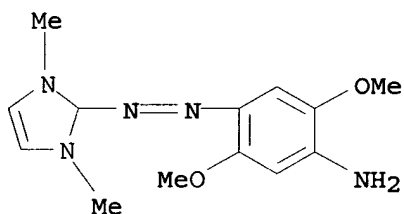
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

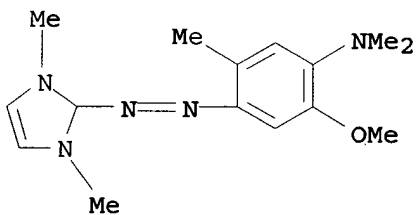
RN 161329-44-8 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

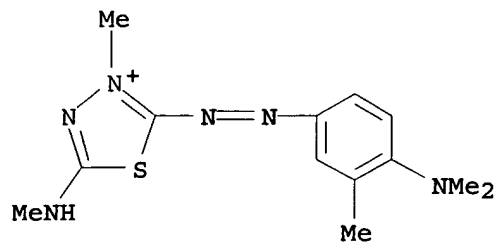
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-47-1 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

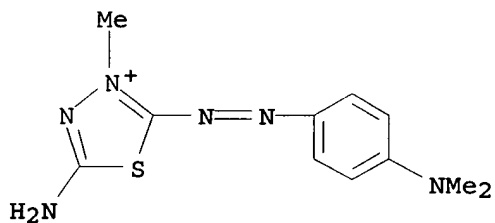
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



CM 2

CRN 21228-90-0

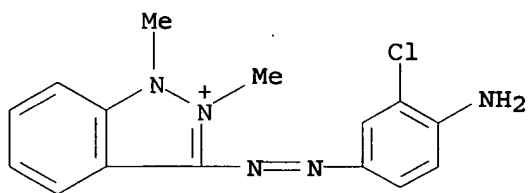
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 167382-87-8 HCAPLUS

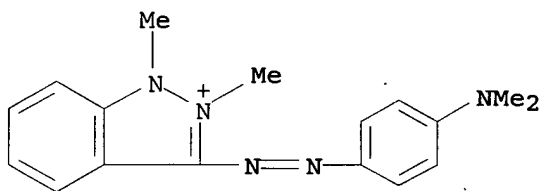
CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)





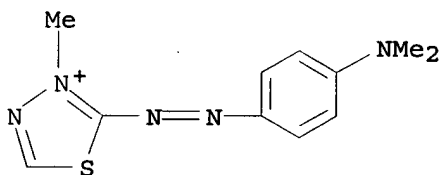
● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS  
 CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



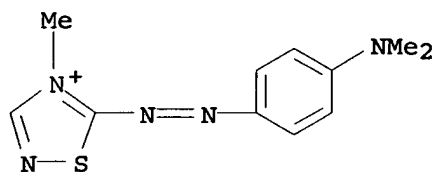
● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



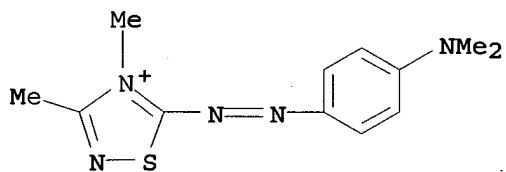
● Cl<sup>-</sup>

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 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



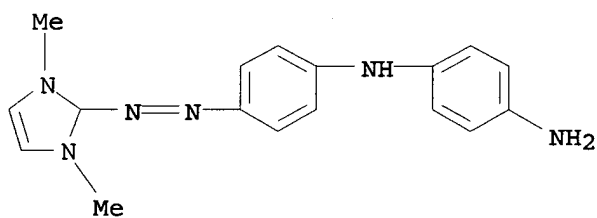
● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

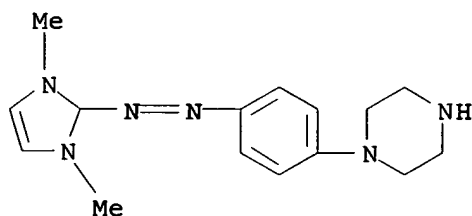
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 CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS  
 CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and **Cosmetics**)

IT 95-55-6D, derivs. 106-50-3D, 1,4-Benzenediamine, derivs.,  
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polyglycoside derivs. 108-45-2D, 1,3-Benzenediamine, derivs.,  
biological studies 123-30-8D, derivs. 591-27-5D, derivs.  
5138-18-1D, Sulfosuccinic acid, alkyl polyglycoside derivs.  
**6687-56-5** 7077-55-6 **7267-43-8** 7664-38-2D,  
Phosphoric acid, alkyl polyglycoside derivs., biological studies  
7664-93-9D, Sulfuric acid, alkyl polyglycoside derivs., biological  
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 251352-48-4 251352-49-5 251352-50-8 251352-55-3

(hair dye compns. containing direct  
 cationic dyes and anionic surfactants)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 46 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:144694 HCAPLUS

DOCUMENT NUMBER: 132:185243

TITLE: Hair dye compositions containing direct  
 cationic dyes and quaternary ammonium salts

INVENTOR(S): Rondeau, Christine

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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ZA 2000001562	A	20001024	ZA 2000-1562	
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				0701
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PRIORITY APPLN. INFO.:			FR 1998-10547	A
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				0509
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OTHER SOURCE(S): MARPAT 132:185243

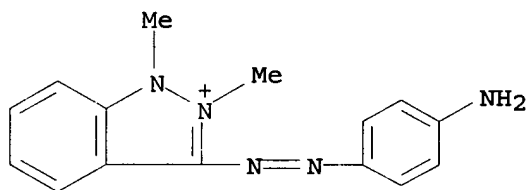
AB A dye composition for keratinous fibers, in particular human keratinous fibers such as hair, comprises in an appropriate dyeing medium, at least a direct cationic dye of specific formula, and characterized in that it further contains at least a quaternary ammonium salt. A hair dye preparation contained 2-(p-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.20, oleocetyldimethyl hydroxyethylammonium 2.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100 %. The composition is applied on the hair for 30 min, then it is rinsed, washed with a shampoo, and dried to obtain a strong red color.

IT 6687-56-5 7267-43-8 41338-82-3  
 41338-83-4 54940-81-7 62163-15-9  
 73447-48-0 75655-00-4 77061-58-6  
 83950-26-9 89923-52-4 97404-02-9  
 109220-25-9 161328-92-3 161329-06-2  
 161329-07-3 161329-08-4 161329-09-5  
 161329-15-3 161329-16-4 161329-17-5  
 161329-18-6 161329-22-2 161329-23-3  
 161329-25-5 161329-27-7 161329-28-8  
 161329-29-9 161329-30-2 161329-31-3  
 161329-35-7 161329-37-9 161329-39-1  
 161329-42-6 161329-43-7 161329-44-8  
 161329-45-9 161329-47-1 161329-49-3  
 167382-87-8 167382-88-9 167382-97-0  
 167382-98-1 167382-99-2 178822-03-2  
 178822-05-4 259545-97-6

(hair dye compns. containing direct  
 cationic dyes and quaternary ammonium salts)

RN 6687-56-5 HCAPLUS

CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
 (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

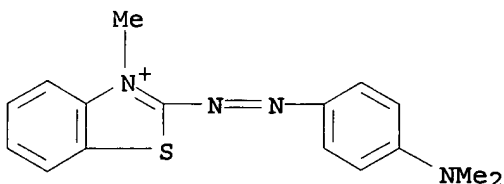
RN 7267-43-8 HCAPLUS

CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 38901-86-9

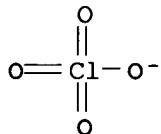
CMF C16 H17 N4 S



CM 2

CRN 14797-73-0

CMF Cl O4



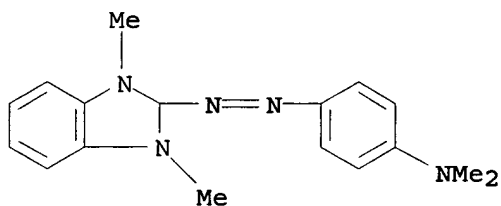
RN 41338-82-3 HCAPLUS

CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 49873-03-2

CMF C17 H20 N5

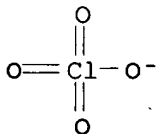


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

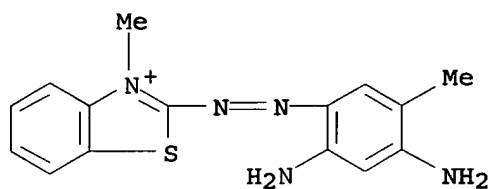
CRN 14797-73-0

CMF Cl O4

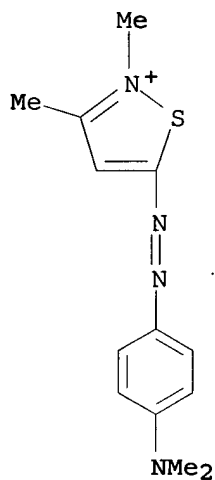


RN 41338-83-4 HCAPLUS

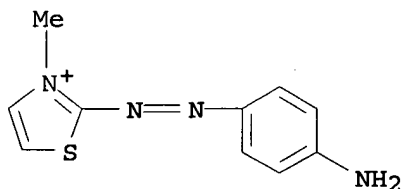
CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-, iodide (9CI) (CA INDEX NAME)

● I<sup>-</sup>

RN 54940-81-7 HCAPLUS  
 CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)

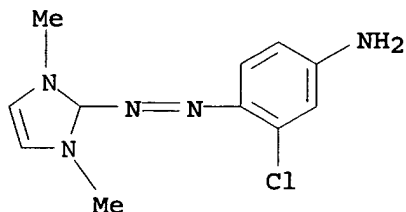
● Cl<sup>-</sup>

RN 62163-15-9 HCAPLUS  
 CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA  
 INDEX NAME)

● Cl<sup>-</sup>



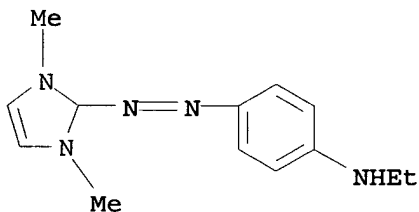
RN 73447-48-0 HCAPLUS  
CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

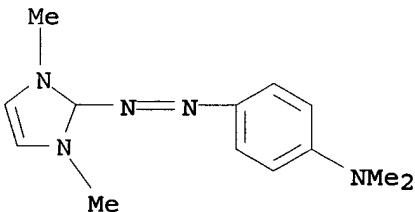
RN 75655-00-4 HCAPLUS  
CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS  
CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

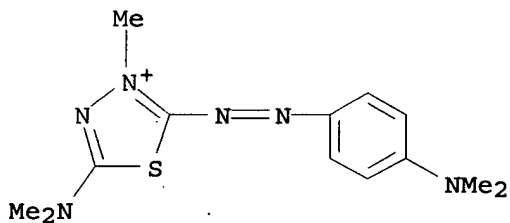
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S



CM 2

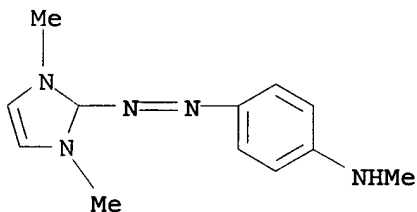
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

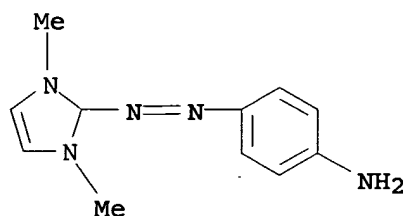


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

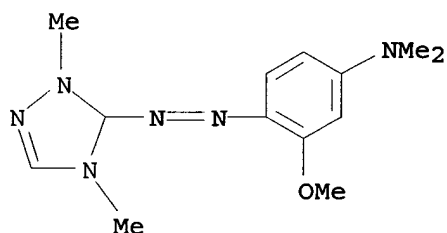


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

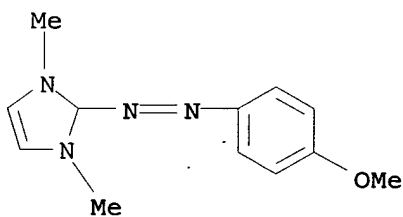


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

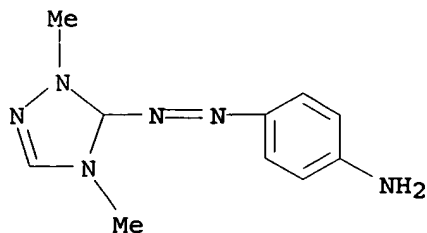


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

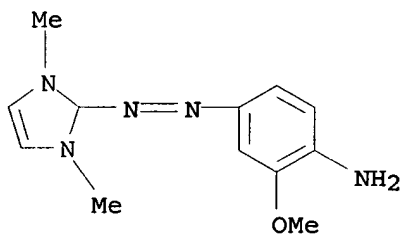


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

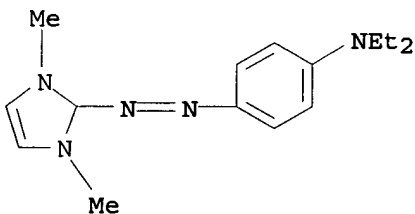


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

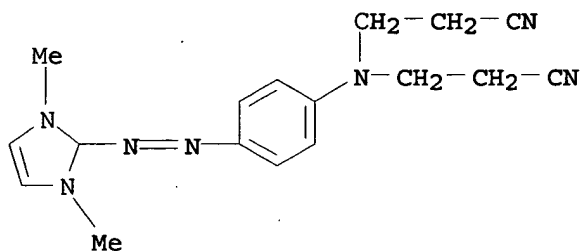


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

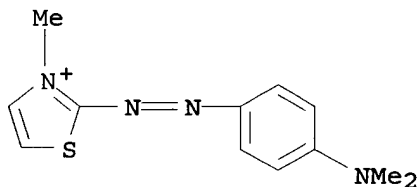


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

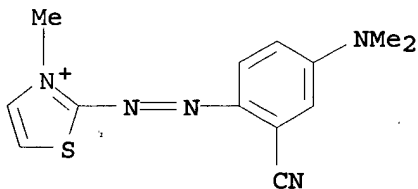
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

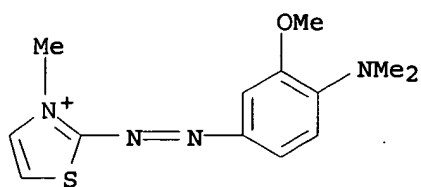
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

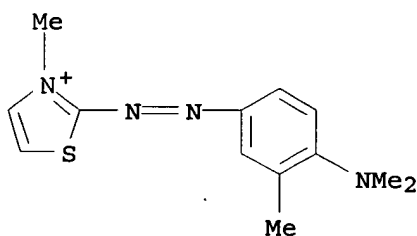
RN 161329-17-5 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



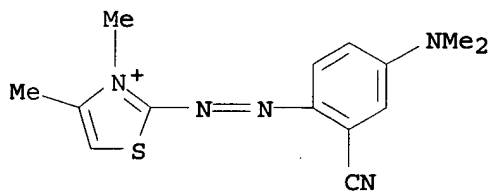
● Cl<sup>-</sup>

RN 161329-18-6 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



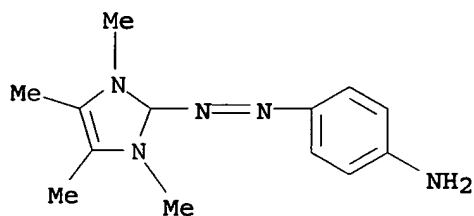
● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS  
 CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-,  
 chloride (9CI) (CA INDEX NAME)

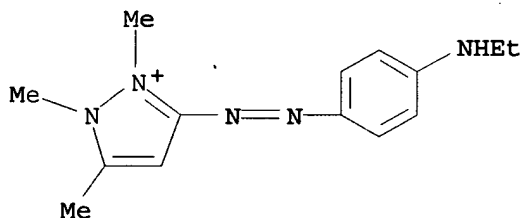


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-25-5 HCAPLUS

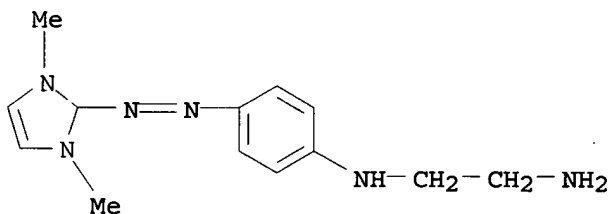
CN 1H-Pyrazolium, 3-[[4-(ethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

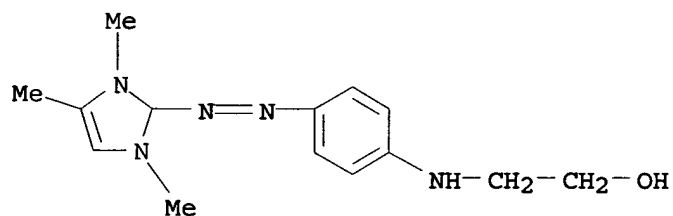


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

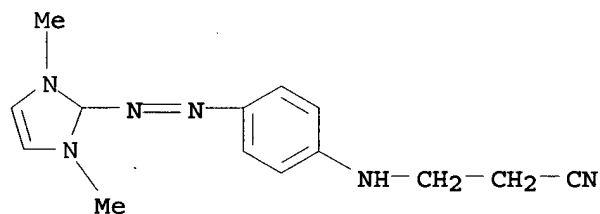
CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

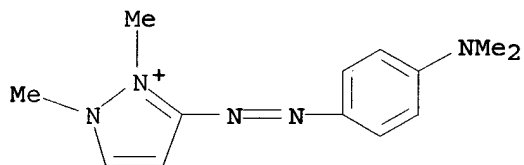
CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-30-2 HCAPLUS

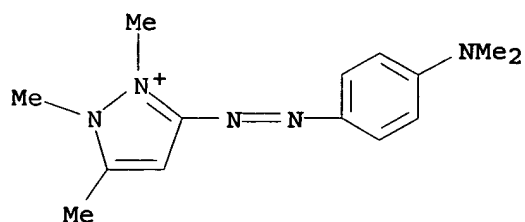
CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)



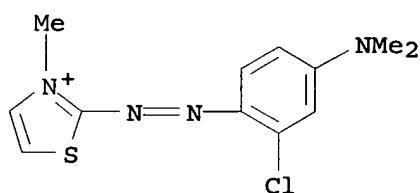


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

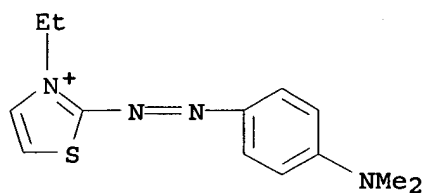
CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-37-9 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl  
 sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8  
 CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

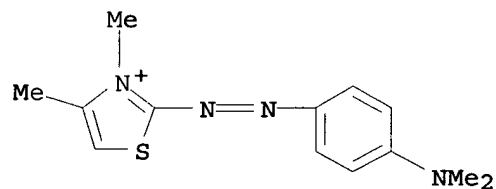
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

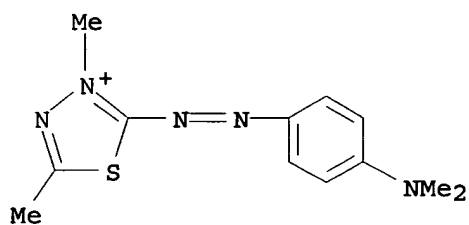
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

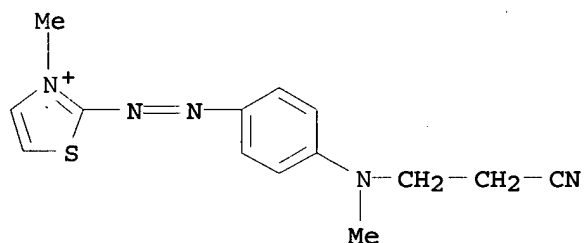
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

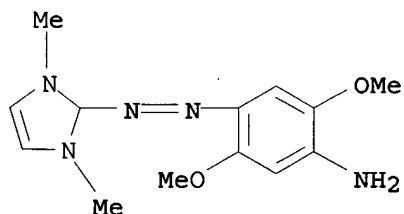
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

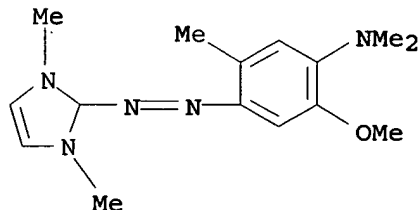
CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

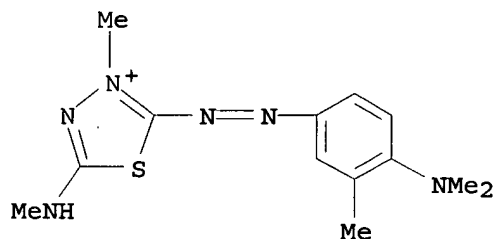
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

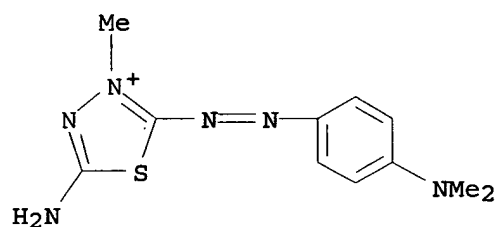
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



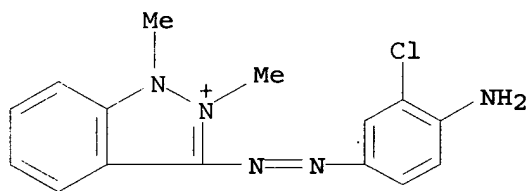
CM 2

CRN 21228-90-0

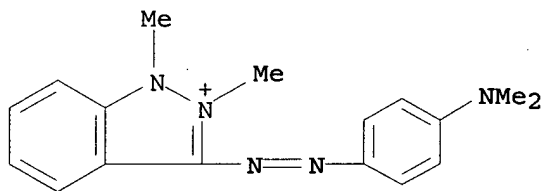
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

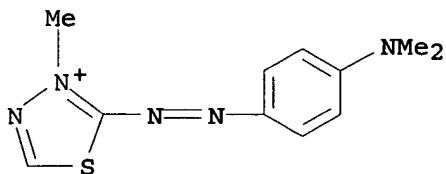
RN 167382-87-8 HCAPLUS

CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS

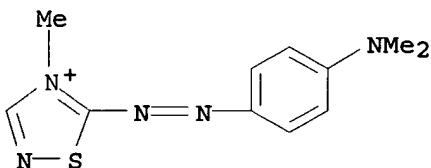
CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



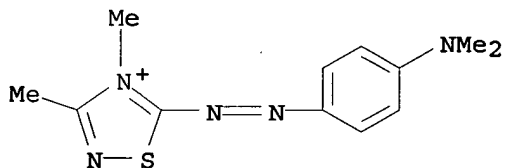
● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS  
CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
chloride (9CI) (CA INDEX NAME)



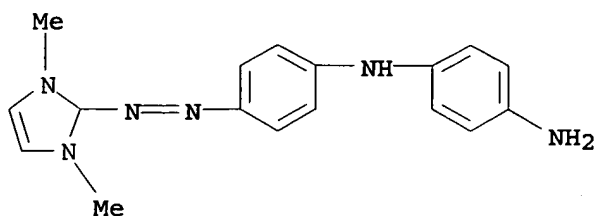
● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS  
CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS  
CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

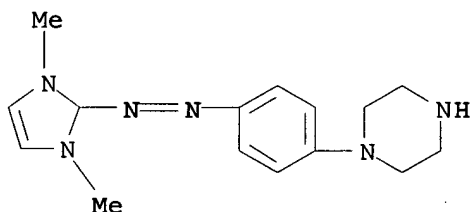


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

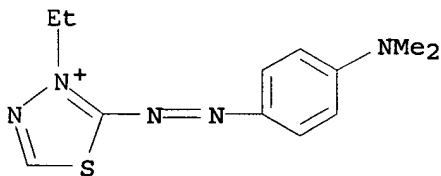
RN 259545-97-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 259545-96-5

CMF C12 H16 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

IC ICM A61K007-13  
 CC 62-3 (Essential Oils and Cosmetics)  
 IT 95-55-6D, derivs. 106-50-3D, 1,4-Benzenediamine, derivs.,  
 biological studies 107-64-2, Distearyltrimethyl ammonium chloride  
 108-45-2D, 1,3-Benzenediamine, derivs., biological studies  
 112-02-7, Cetyltrimethyl ammonium chloride 123-30-8D, derivs.  
 591-27-5D, derivs. 6687-56-5 7077-55-6  
 7267-43-8 7687-09-4 7687-11-8 17301-53-0,  
 Behenyltrimethyl ammonium chloride 26983-52-8D, Diphenol,  
 derivs. 39838-87-4 41338-82-3 41338-83-4  
 41338-95-8 41338-98-1 41339-00-8 42476-20-0 51473-40-6  
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 62163-15-9 64651-39-4 68259-00-7 68912-02-7  
 73447-48-0 75655-00-4 77061-58-6  
 83950-26-9 84912-24-3 89923-52-4 92888-19-2  
 93569-38-1 93569-39-2 93940-65-9 97404-02-9  
 97406-09-2 109220-25-9 143084-49-5 160598-04-9  
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 251352-55-3 259545-90-9 259545-92-1 259545-97-6

(hair dye compns. containing direct  
 cationic dyes and quaternary ammonium salts)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 47 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2000:107288 HCAPLUS



DOCUMENT NUMBER: 132:141677  
 TITLE: Oxidative hair dye composition containing  
 direct cationic dyes  
 INVENTOR(S): Lang, Gerard; Cotteret, Jean  
 PATENT ASSIGNEE(S): Oreal S. A., Fr.  
 SOURCE: Fr. Demande, 58 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
FR 2779054	A1	19991203	FR 1998-6604	1998 0526
			<--	
FR 2779054	B1	20010629		
AU 712792	B1	19991118	AU 1999-23954	1999 0426
			<--	
ZA 9902996	A	19991029	ZA 1999-2996	1999 0429
			<--	
EP 974336	A2	20000126	EP 1999-401159	1999 0511
			<--	
EP 974336	A3	20000308		
EP 974336	B1	20010912		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 205385	E	20010915	AT 1999-401159	1999 0511
			<--	
ES 2164482	T3	20020216	ES 1999-401159	1999 0511
			<--	
PT 974336	T	20020228	PT 1999-401159	1999 0511
			<--	
BR 9902516	A	20000530	BR 1999-2516	1999 0517
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MX 9904751	A	20000831	MX 1999-4751	1999 0521
			<--	
JP 2000007541	A2	20000111	JP 1999-144124	1999 0524
			<--	

JP 3307607	B2	20020724			
CA 2272838	AA	19991126	CA 1999-2272838		1999 0525
			<--		
CN 1236609	A	19991201	CN 1999-107037		1999 0525
			<--		
RU 2161218	C1	20001227	RU 1999-110746		1999 0525
			<--		
US 2002007522	A1	20020124	US 1999-320286		1999 0526
			<--		
US 6358286	B2	20020319			
PRIORITY APPLN. INFO.:			FR 1998-6604	A	1998 0526
			<--		

OTHER SOURCE(S): MARPAT 132:141677

AB Oxidative hair dye composition containing a direct cationic dye and an oxidation base are disclosed. A hair dye composition contained dimethylamino-4'-phenyl-azo-2-pyridine-N-oxide 0.5, p-phenylene diamine 0.324, 5-amino-2-Me phenol 0.369, water and excipients q.s. 100 g. At the time of use equal amts. of the dye and 20 volume hydrogen peroxide are mixed and applied on the hair for 30 min., the hair is then rinsed, washed with shampoo, and dried to obtain an intense red color.

IT 7267-43-8 41338-82-3 41338-83-4  
(oxidative hair dye composition containing direct cationic dyes)

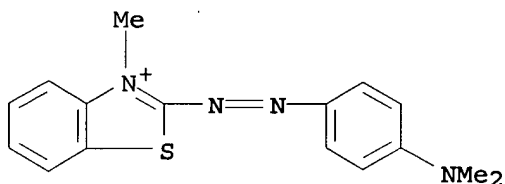
RN 7267-43-8 HCAPLUS

CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 38901-86-9

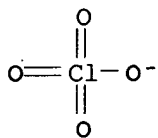
CMF C16 H17 N4 S



CM 2

CRN 14797-73-0

CMF C1 O4



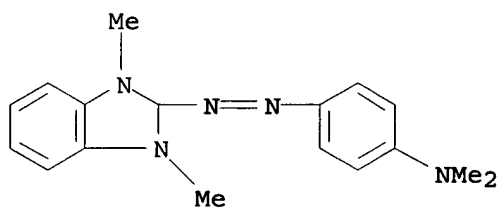
RN 41338-82-3 HCAPLUS

CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 49873-03-2

CMF C17 H20 N5

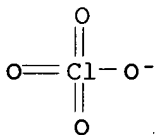


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

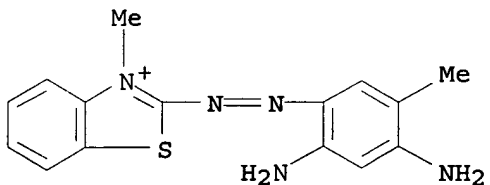
CRN 14797-73-0

CMF C1 O4



RN 41338-83-4 HCAPLUS

CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-, iodide (9CI) (CA INDEX NAME)



● I<sup>-</sup>

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)  
 IT 93-05-0 95-55-6, 2-Aminophenol 95-70-5 99-98-9 101-54-2  
 106-50-3, 1,4-Benzenediamine, biological studies 123-30-8  
 124-43-6 148-71-0 399-95-1, 4-Amino-3-fluorophenol 399-96-2,  
 4-Amino-2-fluorophenol 537-65-5 563-69-9, Carbonoperoxoic acid  
 591-27-5 615-66-7 1630-11-1 2835-96-3, 4-Amino-2-  
 methylphenol 2835-98-5, 2-Amino-5-methylphenol 2835-99-6,  
 4-Amino-3-methylphenol 5306-96-7 5862-80-6 6393-01-7  
 7218-02-2 7267-43-8 7575-35-1 7687-09-4 7687-11-8  
 7722-84-1, Hydrogen peroxide, biological studies 14791-78-7  
 17625-88-6 17625-92-2 17672-22-9, 2-Amino-6-methylphenol  
 27746-11-8 29785-47-5, 4-Amino-2-methoxymethylphenol  
 41338-82-3 41338-83-4 41338-95-8 41338-98-1  
 41339-00-8 51473-40-6 51473-50-8 52132-00-0 52132-02-2  
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 251352-49-5 251352-50-8 251352-55-3 256498-17-6  
 256498-18-7

(oxidative hair dye composition containing  
 direct cationic dyes)

L26 ANSWER 48 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:34549 HCAPLUS

DOCUMENT NUMBER: 132:97843

TITLE: Hair dye composition containing cationic  
 direct dye and thickening polymer

INVENTOR(S): Rondeau, Christine

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: Eur. Pat. Appl., 64 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 970687	A1	20000112	EP 1999-401580	1999 0624
EP 970687	B1	20050608		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2780881	A1	20000114	FR 1998-8833	1998 0709

AT 297182	E	20050615	AT 1999-401580	<--	1999 0624
AU 9936806	A1	20000203	AU 1999-36806	<--	1999 0628
AU 722556	B2	20000803		<--	
ZA 9904283	A	20000110	ZA 1999-4283		1999 0630
KR 2000011486	A	20000225	KR 1999-26861	<--	1999 0705
BR 9903124	A	20000530	BR 1999-3124	<--	1999 0707
MX 9906367	A	20000930	MX 1999-6367	<--	1999 0707
CN 1246330	A	20000308	CN 1999-111493	<--	1999 0708
RU 2185142	C2	20020720	RU 1999-115089	<--	1999 0708
JP 2000063246	A2	20000229	JP 1999-196817	<--	1999 0709
PRIORITY APPLN. INFO.:			FR 1998-8833	<--	A 1998 0709

OTHER SOURCE(S): MARPAT 132:97843

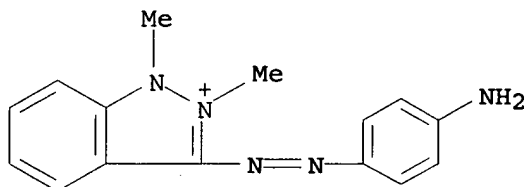
AB Hair dye compns. containing a cationic direct dye and a sugar-containing polymer as thickening agent are disclosed. A hair dye composition contained 2(p-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.2, hydroxyethyl cellulose 1.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100%. The composition is applied on the hair for 30 min., then rinsed, washed with shampoo and dried to obtain a strong red color.

IT 6687-56-5 54940-81-7 62163-15-9  
 73287-60-2 73447-48-0 75655-00-4  
 77061-58-6 83950-26-9 89923-52-4  
 97404-02-9 109220-25-9 161328-92-3  
 161329-06-2 161329-07-3 161329-08-4  
 161329-09-5 161329-15-3 161329-16-4  
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 178822-05-4

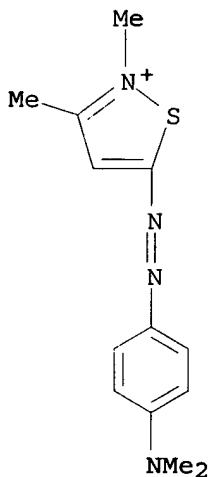
(hair dye composition containing cationic  
 direct dye and thickening polymer)

RN 6687-56-5 HCAPLUS  
 CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride  
 (9CI) (CA INDEX NAME)



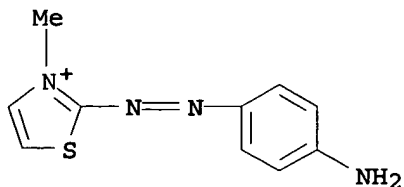
● Cl<sup>-</sup>

RN 54940-81-7 HCAPLUS  
 CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



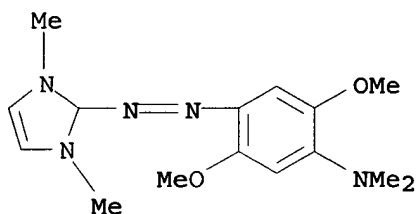
● Cl<sup>-</sup>

RN 62163-15-9 HCAPLUS  
 CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA  
 INDEX NAME)



● Cl<sup>-</sup>

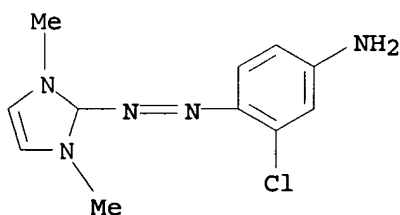
RN 73287-60-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(dimethylamino)-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

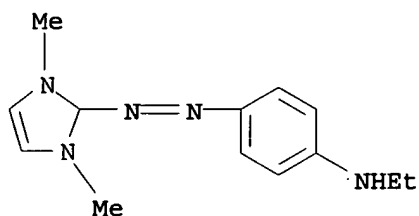
RN 73447-48-0 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-amino-2-chlorophenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

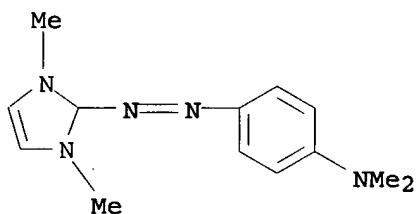


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

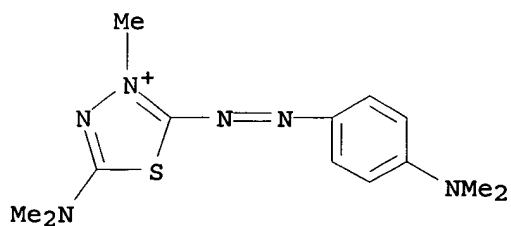
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

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CRN 81921-79-1

CMF C13 H19 N6 S



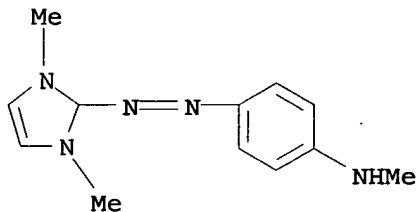
CM 2



CRN 21228-90-0  
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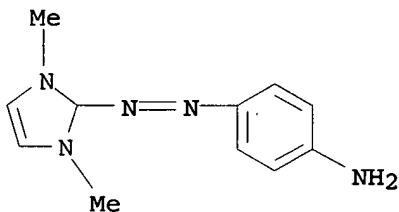
Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS  
CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-,  
chloride (9CI) (CA INDEX NAME)



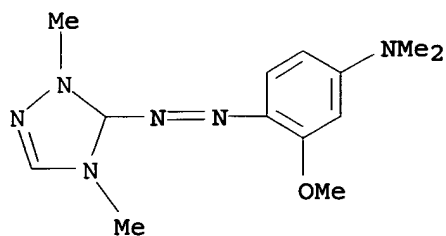
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
RN 97404-02-9 HCAPLUS  
CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride  
(9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE  
RN 109220-25-9 HCAPLUS  
CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-  
1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

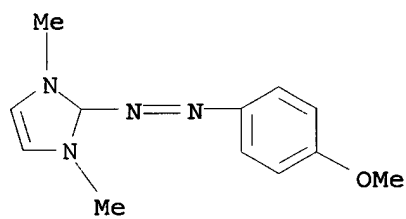


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride  
(9CI) (CA INDEX NAME)

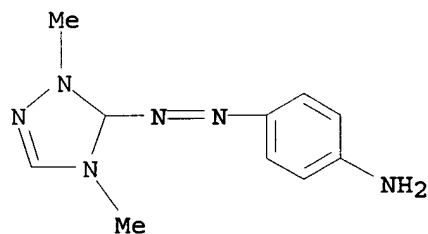


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



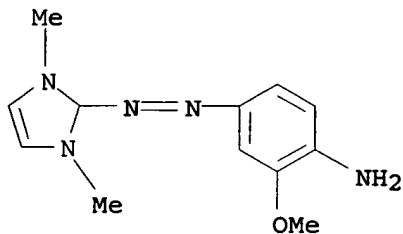
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-,

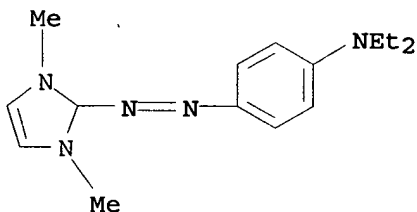
chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

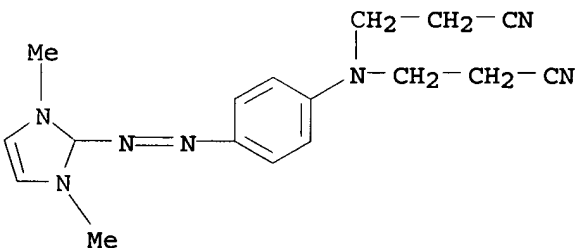
CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

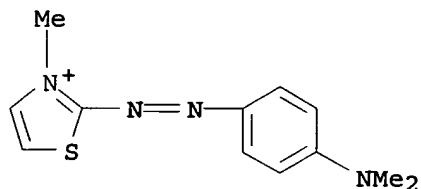
RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

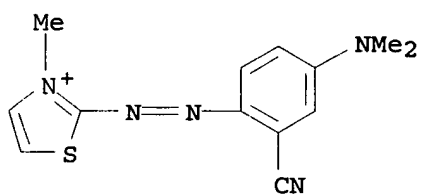
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS  
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride  
(9CI) (CA INDEX NAME)



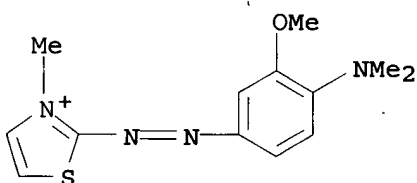
● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS  
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



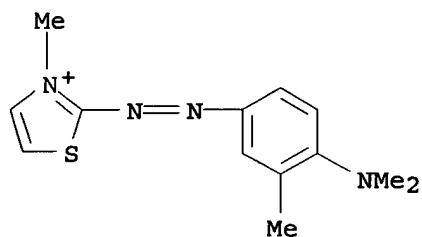
● Cl<sup>-</sup>

RN 161329-17-5 HCAPLUS  
CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

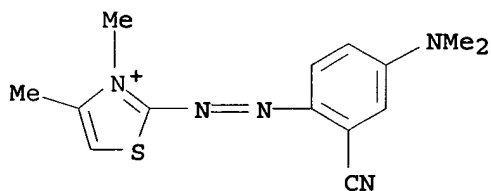
RN 161329-18-6 HCAPLUS  
CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-22-2 HCAPLUS

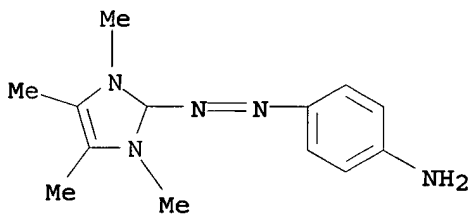
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS

CN 1H-Imidazolium, 2-[[4-aminophenyl]azo]-1,3,4,5-tetramethyl-, chloride (9CI) (CA INDEX NAME)

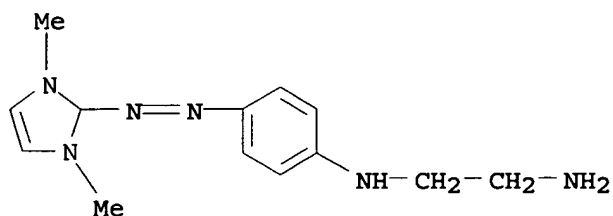


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

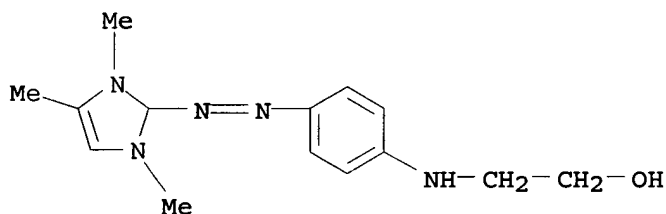


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

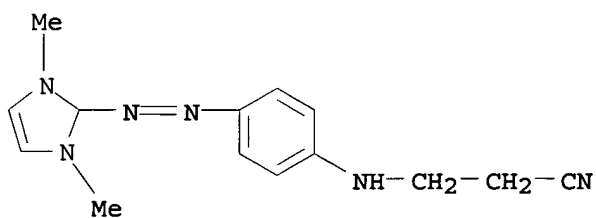


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

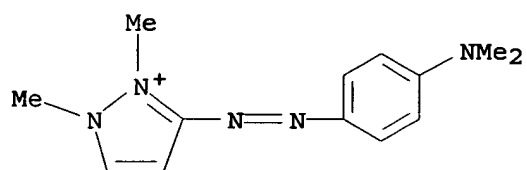


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

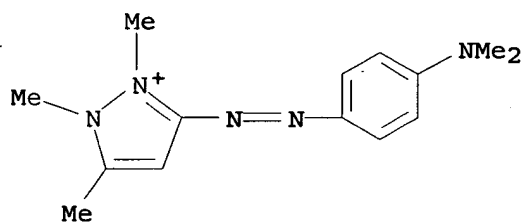
RN 161329-30-2 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS  
 CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-,  
 chloride (9CI) (CA INDEX NAME)

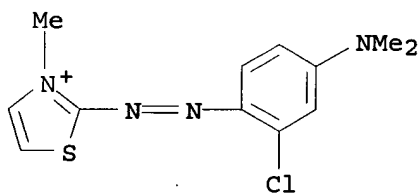


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

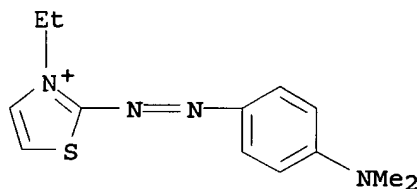
CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-37-9 HCAPLUS  
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8  
CMF C13 H17 N4 S



CM 2

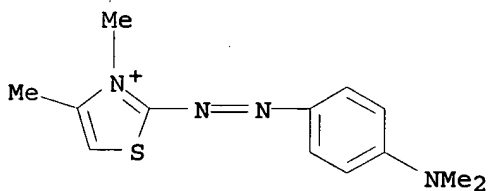
CRN 21228-90-0  
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-39-1 HCAPLUS  
CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8  
CMF C13 H17 N4 S



CM 2

CRN 21228-90-0  
CMF C H3 O4 S



Me-O-SO<sub>3</sub><sup>-</sup>

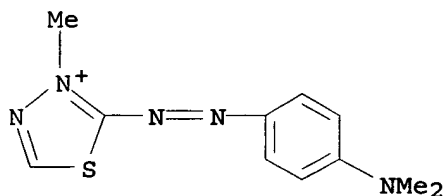
RN 161329-40-4 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

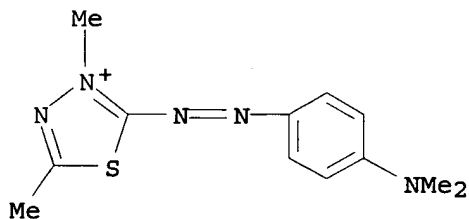
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

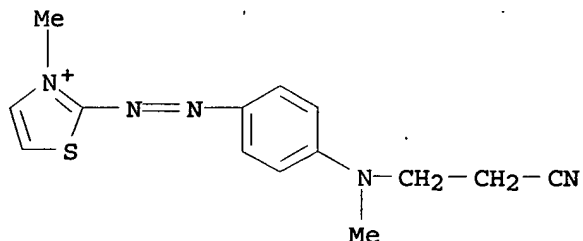
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-43-7 HCAPLUS

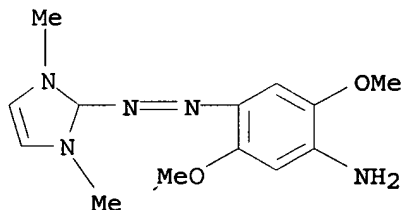
CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

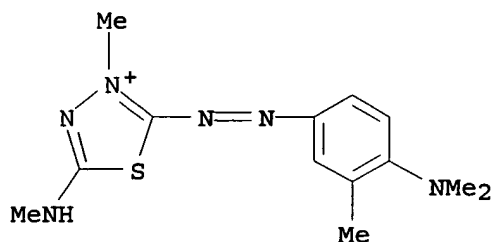
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

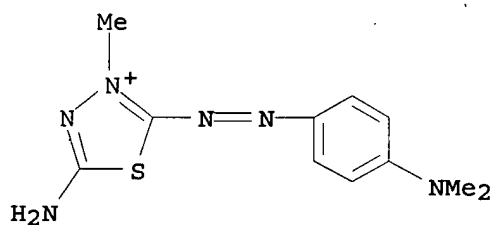
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



CM 2

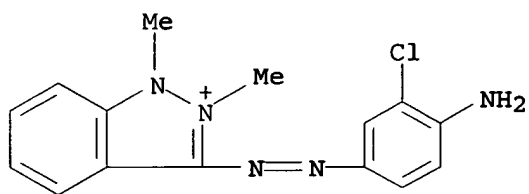
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

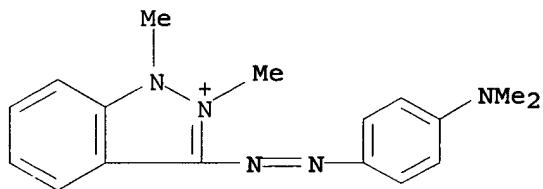
RN 167382-87-8 HCAPLUS

CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



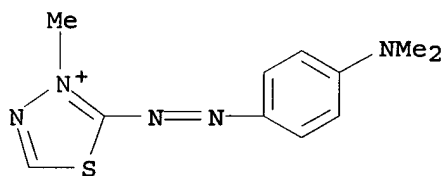
● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS  
 CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



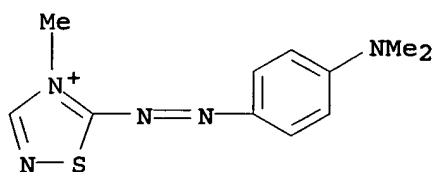
● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



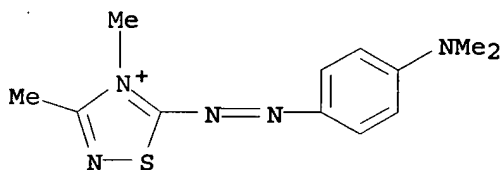
● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



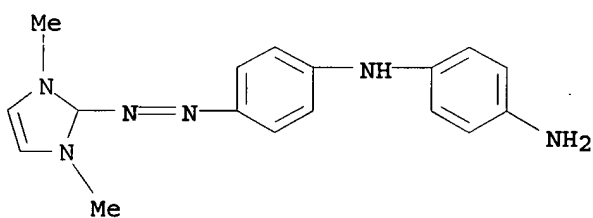
● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

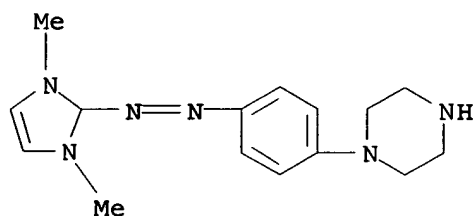
RN 178822-03-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS  
 CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 38

IT 95-55-6D, derivs. 106-50-3D, 1,4-Benzenediamine, derivs.,  
 biological studies 108-45-2D, 1,3-Benzenediamine, derivs.,  
 biological studies 123-30-8D, p-Aminophenol, derivs.  
 591-27-5D, derivs. 6687-56-5 9004-32-4, Carboxymethyl  
 cellulose 9004-42-6, Carboxyethyl cellulose 9004-62-0  
 26983-52-8D, Diphenol, derivs. 39464-87-4, Scleroglucan  
 39838-87-4 42476-20-0 54940-81-7 62163-15-9  
 64651-39-4 68259-00-7 68912-02-7 73287-60-2  
 73447-48-0 75655-00-4 77061-58-6  
 83950-26-9 84912-24-3 89923-52-4 93940-65-9  
 97404-02-9 97406-09-2 109220-25-9  
 143084-49-5 160598-04-9 161328-83-2 161328-85-4  
 161328-86-5 161328-87-6 161328-89-8 161328-91-2  
 161328-92-3 161328-94-5 161328-95-6 161328-96-7  
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 161329-31-3 161329-35-7 161329-37-9  
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 161329-42-6 161329-43-7 161329-44-8  
 161329-47-1 161329-49-3 167382-76-5  
 167382-77-6 167382-78-7 167382-79-8 167382-80-1  
 167382-82-3 167382-83-4 167382-87-8  
 167382-88-9 167382-95-8 167382-96-9  
 167382-97-0 167382-98-1 167382-99-2  
 178822-03-2 178822-05-4 211050-61-2  
 232284-18-3 254450-91-4

(hair dye composition containing cationic  
 direct dye and thickening polymer)

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 49 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:34548 HCAPLUS

DOCUMENT NUMBER: 132:83379

TITLE: Hair dye composition containing cationic  
 direct dye and thickening polymer

PATENT ASSIGNEE(S): L'Oreal, Fr.  
 SOURCE: Eur. Pat. Appl., 53 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 970686	A1	20000112	EP 1999-401548	1999 0622
<--				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2780880	A1	20000114	FR 1998-8832	1998 0709
<--				
ZA 9904229	A	20000112	ZA 1999-4229	1999 0628
<--				
AU 9936808	A1	20000203	AU 1999-36808	1999 0628
<--				
AU 723986	B2	20000907		
KR 2000011443	A	20000225	KR 1999-26616	1999 0702
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MX 9906326	A	20000831	MX 1999-6326	1999 0706
<--				
BR 9903125	A	20000530	BR 1999-3125	1999 0707
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CN 1248435	A	20000329	CN 1999-119516	1999 0708
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US 2002010968	A1	20020131	US 1999-349436	1999 0708
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US 2003005525	A9	20030109		
US 6613102	B2	20030902		
RU 2179843	C2	20020227	RU 1999-115091	1999 0708
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JP 2000063247	A2	20000229	JP 1999-196816	1999 0709
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PRIORITY APPLN. INFO.:

FR 1998-8832

A

1998

0709

&lt;--

OTHER SOURCE(S): MARPAT 132:83379

AB Hair dye compns. containing a cationic direct dye and a cationic polymer as thickening agent are disclosed. A hair dye composition contained 2(p-dimethylaminoazo)-4-methylpyridine N-oxide 0.2, guar gum 1.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100%. The composition is applied on the hair for 30 min., then rinsed, washed with shampoo and dried to obtain a strong red color.

IT 7267-43-8 41338-82-3 41338-83-4  
(hair dye composition containing cationic direct dye and thickening polymer)

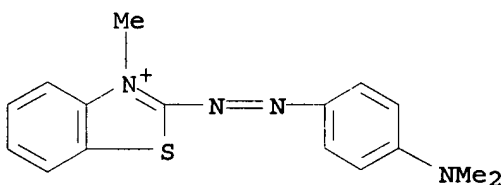
RN 7267-43-8 HCAPLUS

CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 38901-86-9

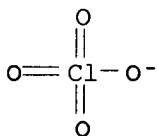
CMF C16 H17 N4 S



CM 2

CRN 14797-73-0

CMF C1 O4



RN 41338-82-3 HCAPLUS

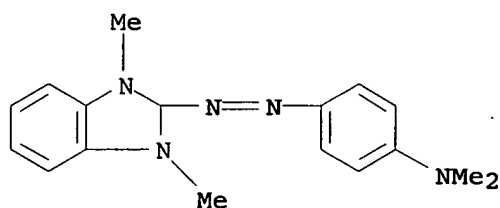
CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 49873-03-2

CMF C17 H20 N5



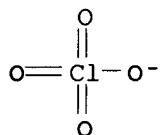


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

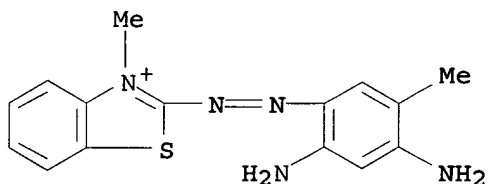
CRN 14797-73-0

CMF Cl O4



RN 41338-83-4 HCAPLUS

CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-,  
iodide (9CI) (CA INDEX NAME)



● I<sup>-</sup>

IC ICM A61K007-13

CC 62-3 (Essential Oils and **Cosmetics**)

Section cross-reference(s): 38

IT 95-55-6D, derivs. 106-50-3D, 1,4-Benzenediamine, derivs.,  
biological studies 108-45-2D, 1,3-Benzenediamine, derivs.,  
biological studies 123-30-8D, p-Aminophenol, derivs.  
591-27-5D, derivs. 7077-55-6 7267-43-8 7687-09-4  
7687-11-8 9004-32-4, Carboxymethyl cellulose 26983-52-8D,  
Diphenol, derivs. 39464-87-4, Scleroglucan 41338-82-3  
41338-83-4 41338-95-8 41338-98-1 41339-00-8  
51473-40-6 51473-50-8 52132-00-0 52132-02-2 52132-03-3  
52132-04-4 52132-05-5 52132-06-6 52132-11-3 52132-12-4  
52132-13-5 52132-14-6 52132-15-7 52132-16-8 52132-17-9  
52132-18-0 52132-19-1 52132-20-4 52132-21-5 52132-22-6  
52132-23-7 52132-24-8 52132-25-9 52132-26-0 52132-27-1  
52132-28-2 52132-30-6 52132-31-7 59405-36-6 59405-38-8  
59405-42-4 59405-44-6 59405-45-7 59405-47-9 59405-48-0

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 59642-75-0 59642-77-2 59642-93-2 59642-95-4 59643-09-3  
 59643-10-6 93569-38-1 93569-39-2 251352-40-6 251352-41-7  
 251352-42-8 251352-43-9 251352-44-0 251352-45-1  
 251352-46-2 251352-47-3 251352-48-4 251352-49-5  
 251352-50-8 251352-53-1 251352-55-3 254098-10-7

(hair dye composition containing cationic  
 direct dye and thickening polymer)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 50 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:34547 HCAPLUS

DOCUMENT NUMBER: 132:97842

TITLE: Hair dye composition containing a cationic  
 direct dye and a thickening polymer  
 INVENTOR(S): Rondeau, Christine; Lang, Gerard; Cotteret,  
 Jean

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: Eur. Pat. Appl., 103 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 970685	A1	20000112	EP 1999-401523	1999 0618
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EP 970685	B1	20050601		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2780882	A1	20000114	FR 1998-8834	1998 0709
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FR 2780882	B1	20010406		
AT 296608	E	20050615	AT 1999-401523	1999 0618
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ZA 9904142	A	19991223	ZA 1999-4142	1999 0623
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AU 9936777	A1	20000203	AU 1999-36777	1999 0625
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AU 723806	B2	20000907		
BR 9903081	A	20000509	BR 1999-3081	1999 0630
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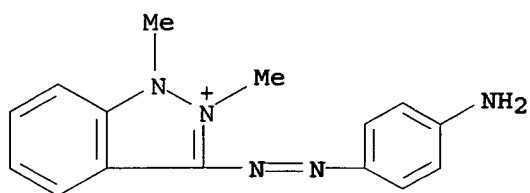
MX 9906255	A	20000731	MX 1999-6255	1999 0702
KR 2000011515	A	20000225	KR 1999-27052	1999 0706
CN 1246331	A	20000308	CN 1999-111494	1999 0708
RU 2179436	C2	20020220	RU 1999-114774	1999 0708
JP 2000063248	A2	20000229	JP 1999-229401	1999 0709
PRIORITY APPLN. INFO.:			FR 1998-8834	1998 0709

AB Hair dye compns. containing a cationic direct dye and a thickening polymer, such as polyacrylates, are disclosed. A hair dye composition contained 2(p-(4-aminiodimethyl)phenylazo)-1,3-dimethylimidazolium chloride 0.2, acrylamide-ammonium acrylate copolymer (Bozepol C) 1.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100%. The composition is applied on the hair for 30 min., then rinsed with water, washed with shampoo and dried to obtain a strong orange color.

IT 6687-56-5 7267-43-8 41338-82-3  
41338-83-4 54940-81-7 62163-15-9  
69742-21-8 73447-48-0 75655-00-4  
77061-58-6 83950-26-9 89923-52-4  
97404-02-9 109220-25-9 161328-92-3  
161329-06-2 161329-07-3 161329-08-4  
161329-09-5 161329-15-3 161329-16-4  
161329-17-5 161329-18-6 161329-22-2  
161329-23-3 161329-27-7 161329-28-8  
161329-29-9 161329-30-2 161329-31-3  
161329-35-7 161329-39-1 161329-40-4  
161329-42-6 161329-43-7 161329-44-8  
161329-45-9 161329-47-1 161329-49-3  
167382-87-8 167382-88-9 167382-97-0  
167382-98-1 167382-99-2 178822-03-2  
178822-05-4  
(hair dye composition containing cationic direct dye and thickening polymer)

RN 6687-56-5 HCAPLUS

CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)

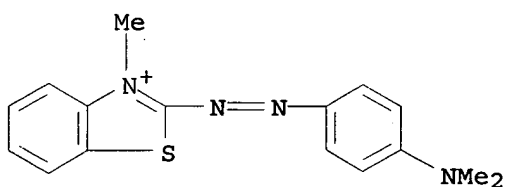


● Cl<sup>-</sup>

RN 7267-43-8 HCAPLUS  
 CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 perchlorate (9CI) (CA INDEX NAME)

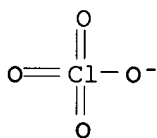
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CRN 38901-86-9  
 CMF C16 H17 N4 S



CM 2

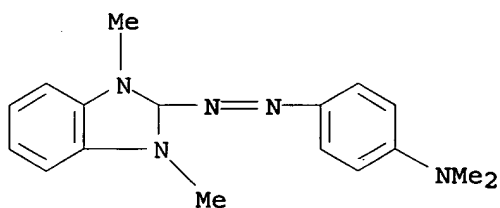
CRN 14797-73-0  
 CMF C1 O4



RN 41338-82-3 HCAPLUS  
 CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
 perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 49873-03-2  
 CMF C17 H20 N5

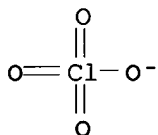


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

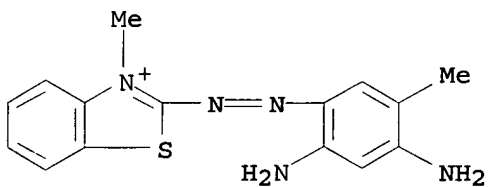
CRN 14797-73-0

CMF Cl O4



RN 41338-83-4 HCAPLUS

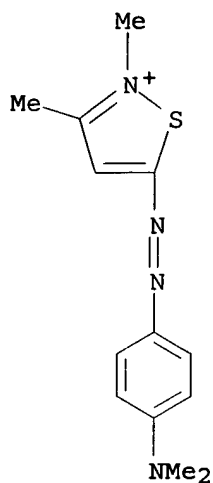
CN Benzothiazolium, 2-[(2,4-diamino-5-methylphenyl)azo]-3-methyl-,  
iodide (9CI) (CA INDEX NAME)



● I<sup>-</sup>

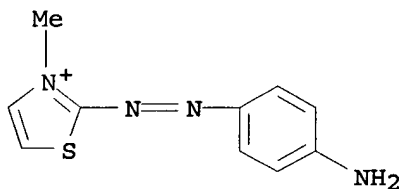
RN 54940-81-7 HCAPLUS

CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 62163-15-9 HCAPLUS  
 CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

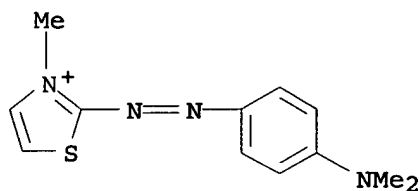


● Cl<sup>-</sup>

RN 69742-21-8 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 69742-20-7  
 CMF C12 H15 N4 S



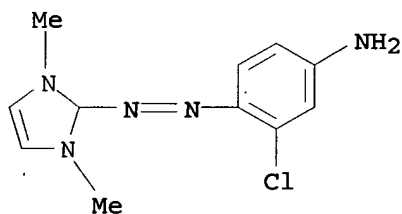
CM 2

CRN 21228-90-0

CMF C H3 O4 S

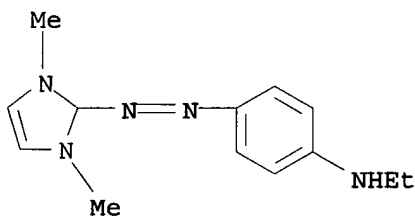
Me-O-SO<sub>3</sub><sup>-</sup>

RN 73447-48-0 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

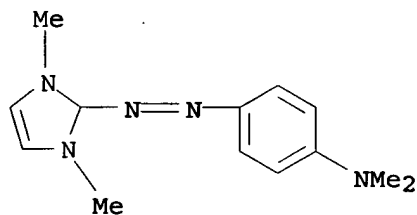
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



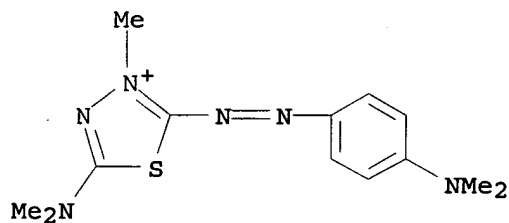
● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 83950-26-9 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1  
 CMF C13 H19 N6 S



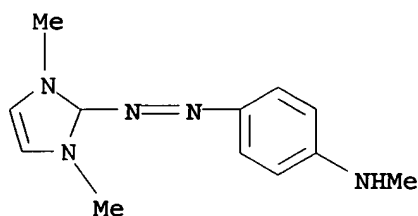
CM 2

CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS  
 CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-,  
 chloride (9CI) (CA INDEX NAME)



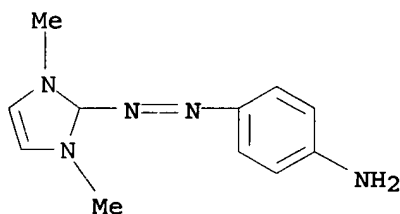


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

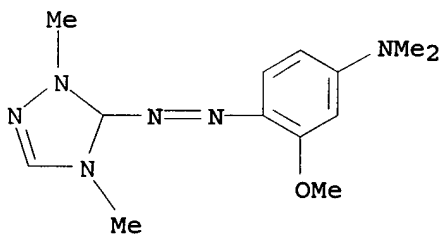


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

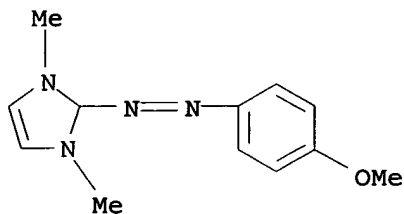


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

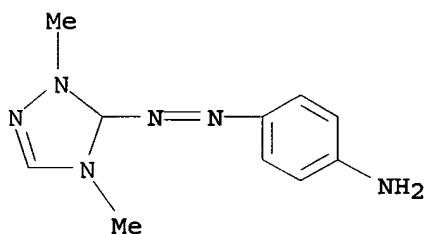


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

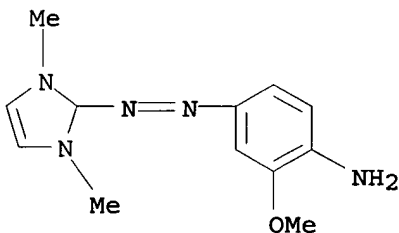


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

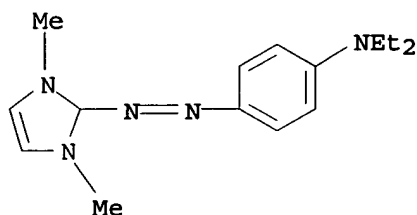


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

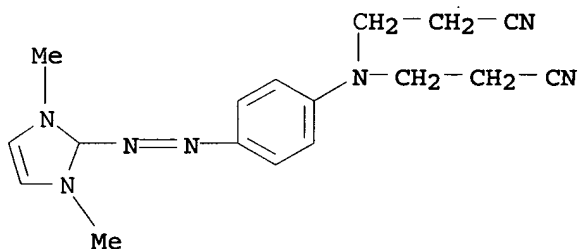


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

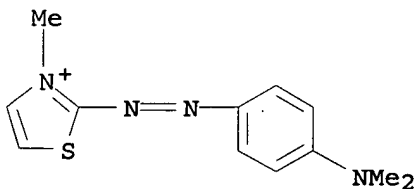


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

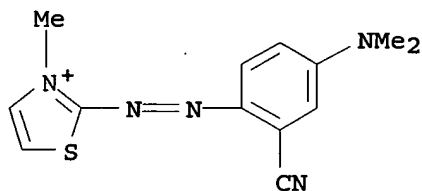


● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

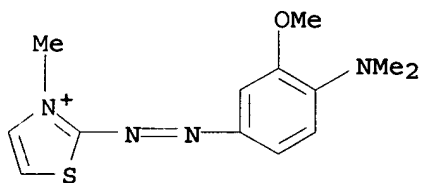
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-,

chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

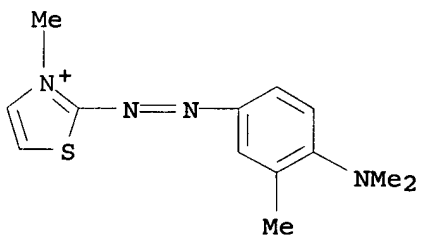
RN 161329-17-5 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

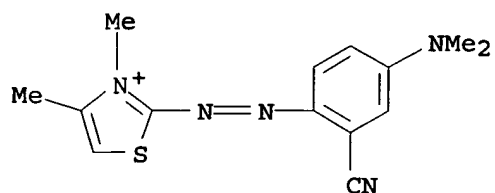
RN 161329-18-6 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

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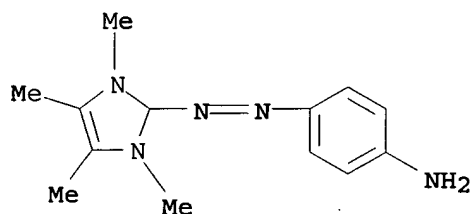
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-, chloride (9CI) (CA INDEX NAME)

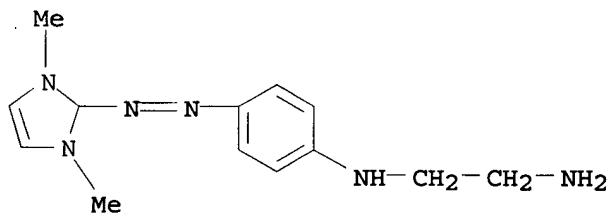


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-27-7 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

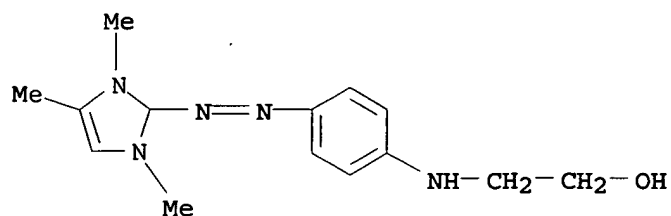


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3,4-trimethyl-, chloride (9CI) (CA INDEX NAME)

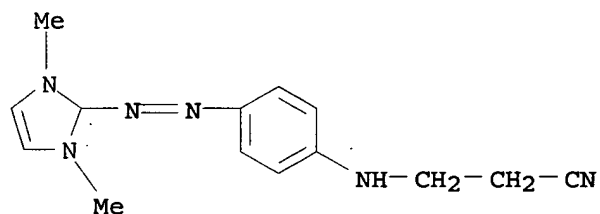


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

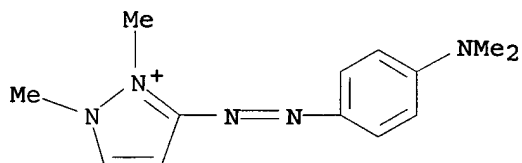


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-30-2 HCAPLUS

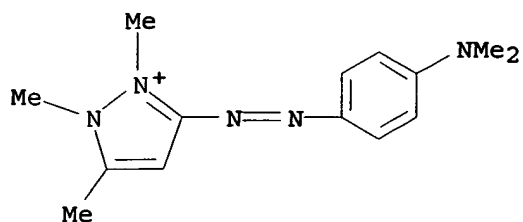
CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)

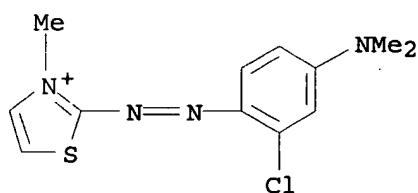


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

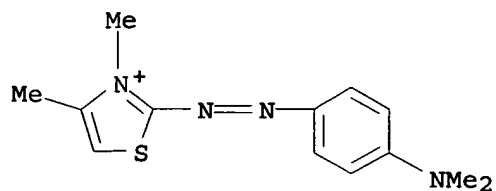
CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-39-1 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl  
 sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8  
 CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

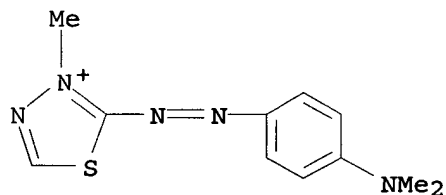
RN 161329-40-4 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-42-6 HCAPLUS

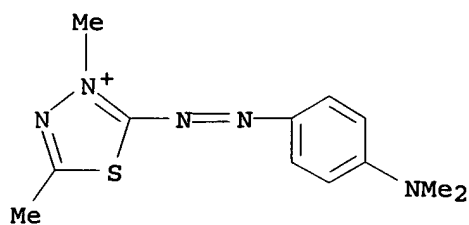
CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-,  
methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S





CM 2

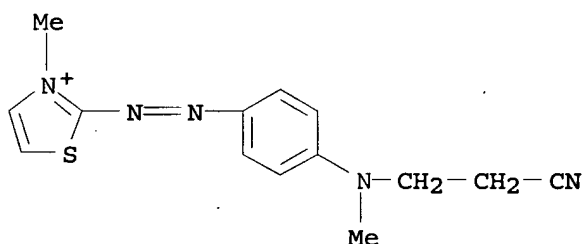
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

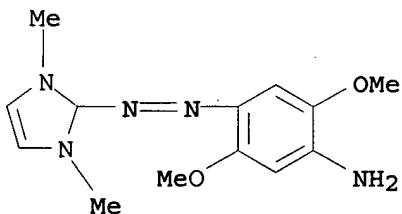
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

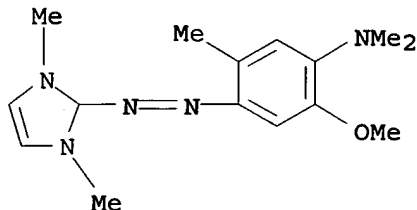
CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-45-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-5-methoxy-2-methylphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

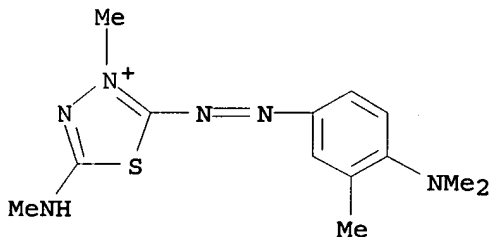
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

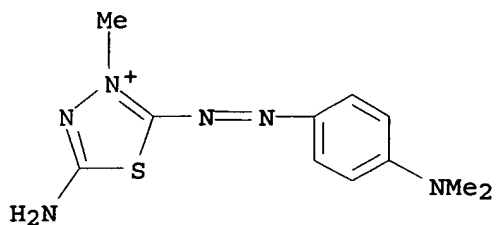
RN 161329-49-3 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2

CMF C11 H15 N6 S



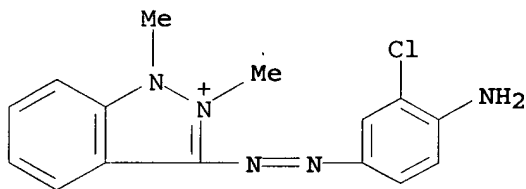
CM 2

CRN 21228-90-0

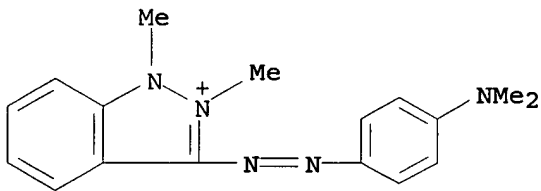
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

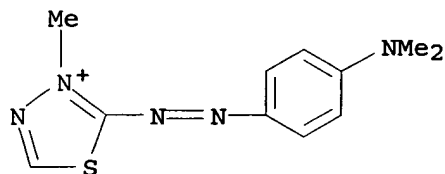
RN 167382-87-8 HCAPLUS

CN 1H-Indazolium, 3-[(4-amino-3-chlorophenyl)azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS

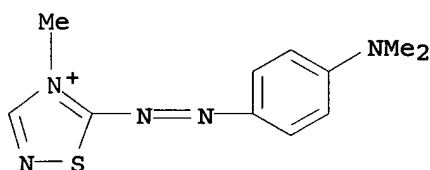
CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-,  
chloride (9CI) (CA INDEX NAME)● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



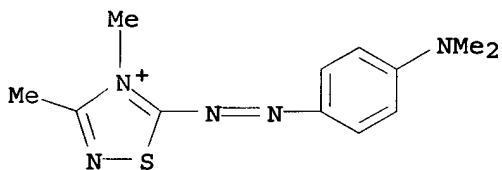
● Cl<sup>-</sup>

RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



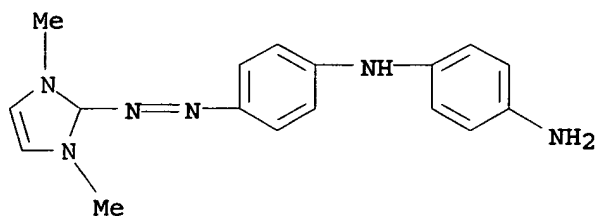
● Cl<sup>-</sup>

RN 167382-99-2 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 178822-03-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)

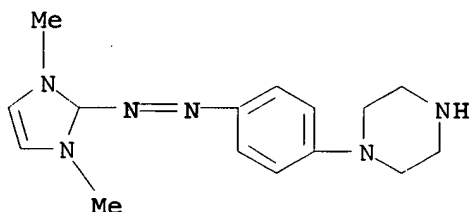


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 178822-05-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 38

IT 95-55-6D, derivs. 108-45-2D, 1,3-Benzenediamine, derivs.,

biological studies 108-46-3D, 1,3-Benzenediol, derivs.,

biological studies 123-30-8D, p-Aminophenol, derivs.

591-27-5D, derivs. 6687-56-5 7077-55-6

7267-43-8 7687-09-4 7687-11-8 25085-35-2, Ethyl

acrylate acrylic acid copolymer 25212-88-8, Ethyl acrylate

methacrylic acid copolymer 26100-47-0, Bozepole C Nouveau

39838-87-4 41338-82-3 41338-83-4 41338-95-8

41338-98-1 41339-00-8 42476-20-0 51473-40-6 51473-50-8

52132-00-0 52132-03-3 52132-04-4 52132-05-5 52132-06-6

52132-11-3 52132-12-4 52132-13-5 52132-14-6 52132-15-7

52132-16-8 52132-17-9 52132-18-0 52132-19-1 52132-20-4

52132-21-5 52132-22-6 52132-23-7 52132-24-8 52132-25-9

52132-26-0 52132-27-1 52132-28-2 52132-31-7

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59405-44-6 59405-45-7 59405-47-9 59405-48-0 59405-54-8

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59643-09-3 59643-10-6 62163-15-9 64651-39-4

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 167382-96-9 167382-97-0 167382-98-1  
 167382-99-2 176304-01-1, Carbopol 2984  
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 251352-55-3 254737-17-2 254737-27-4 254888-57-8, Viscoatex  
 538C

(hair dye composition containing cationic  
 direct dye and thickening polymer)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 51 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:34546 HCAPLUS

DOCUMENT NUMBER: 132:83378

TITLE: Hair dye compositions containing a cationic  
 direct dye and a thickening polymer

INVENTOR(S): Lang, Gerard; Cotteret, Jean

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: Eur. Pat. Appl., 105 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 970684	A1	20000112	EP 1999-401521	1999 0618
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EP 970684	B1	20050608		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2780883	A1	20000114	FR 1998-8835	1998 0709

FR 2780883	B1	20010406	<--	
AT 297181	E	20050615	AT 1999-401521	1999 0618
ZA 9904102	A	20000125	ZA 1999-4102	1999 0622
AU 9937966	A1	20000309	AU 1999-37966	1999 0702
AU 719497	B2	20000511	<--	
BR 9903212	A	20000530	BR 1999-3212	1999 0705
KR 2000011517	A	20000225	KR 1999-27067	1999 0706
MX 9906325	A	20000331	MX 1999-6325	1999 0706
CN 1248434	A	20000329	CN 1999-119515	1999 0708
RU 2180833	C2	20020327	RU 1999-115166	1999 0708
JP 2000086472	A2	20000328	JP 1999-196815	1999 0709
US 2005144741	A1	20050707	US 2004-869058	2004 0617
JP 2004339236	A2	20041202	JP 2004-233178	2004 0810
PRIORITY APPLN. INFO.:			FR 1998-8835	A 1998 0709
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			JP 1999-196815	A3 1999 0709
OTHER SOURCE(S) :		MARPAT 132:83378	<--	

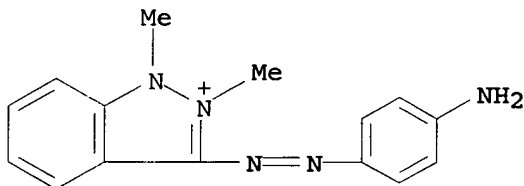
AB Hair dye compns. containing a cationic direct dye and a amphiphilic nonionic polymer as thickening agent are disclosed. A hair dye composition contained 2(p-(4-aminodimethyl)phenylazo)-1,3-dimethylimidazolium chloride 0.2, Et acrylate-methacrylic acid-steareth-10-allyl ether copolymer (Salcare SC90) 1.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100%. The composition is applied on the hair for 30 min., then rinsed, washed with shampoo and dried to obtain a strong orange color.

IT 6687-56-5 7267-43-8 41338-82-3  
 54940-81-7 62163-15-9 73287-60-2  
 73447-48-0 75655-00-4 77061-58-6  
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 167382-88-9 167382-97-0 167382-98-1  
 167382-99-2 178822-03-2 178822-05-4  
 254111-15-4 254111-46-1

(hair dye composition containing cationic direct dye and thickening polymer)

RN 6687-56-5 HCAPLUS

CN 1H-Indazolium, 3-[(4-aminophenyl)azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 7267-43-8 HCAPLUS

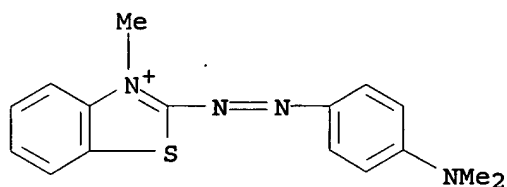
CN Benzothiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, perchlorate (9CI) (CA INDEX NAME)

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CRN 38901-86-9

CMF C16 H17 N4 S

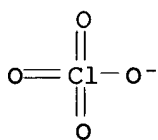




CM 2

CRN 14797-73-0

CMF Cl O4



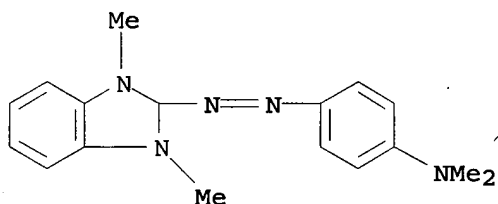
RN 41338-82-3 HCAPLUS

CN 1H-Benzimidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 49873-03-2

CMF C17 H20 N5

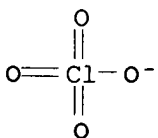


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 14797-73-0

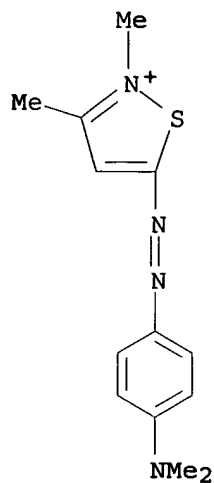
CMF Cl O4



RN 54940-81-7 HCAPLUS

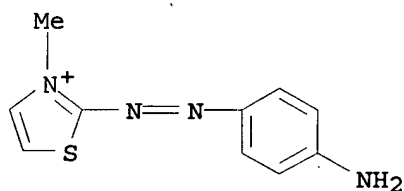
CN Isothiazolium, 5-[[4-(dimethylamino)phenyl]azo]-2,3-dimethyl-,

chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

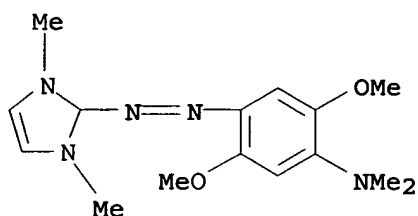
RN 62163-15-9 HCAPLUS

CN Thiazolium, 2-[(4-aminophenyl)azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 73287-60-2 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

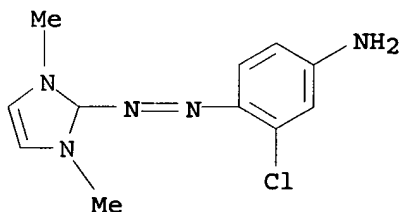


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 73447-48-0 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

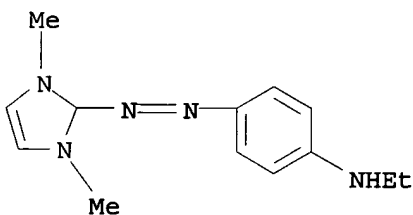


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 75655-00-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(ethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

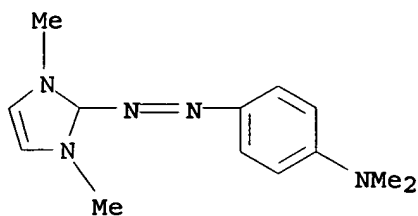


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 77061-58-6 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(dimethylamino)phenyl]azo]-1,3-dimethyl-,  
chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

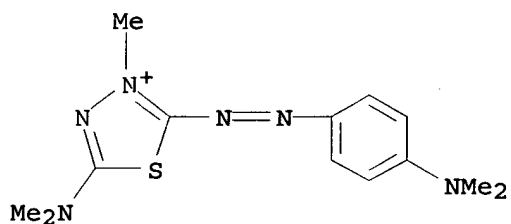
RN 83950-26-9 HCAPLUS

CN 1,3,4-Thiadiazolium, 5-(dimethylamino)-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 81921-79-1

CMF C13 H19 N6 S



CM 2

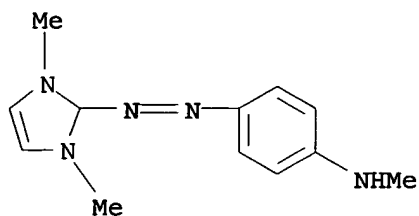
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 89923-52-4 HCAPLUS

CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)

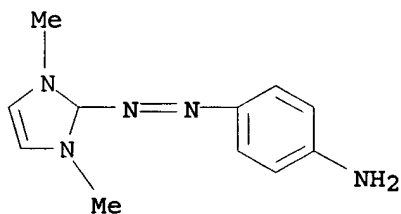


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 97404-02-9 HCAPLUS

CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

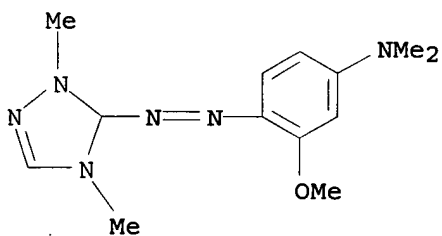


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 109220-25-9 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,4-dimethyl-, chloride (9CI) (CA INDEX NAME)

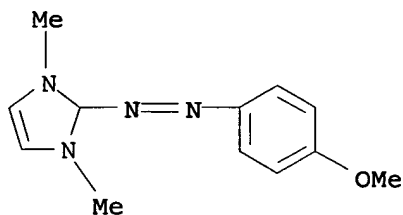


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161328-92-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-methoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

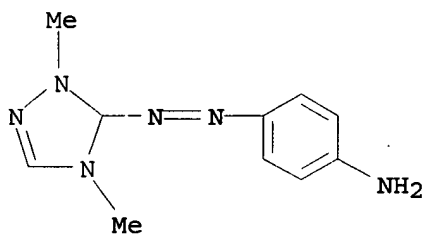


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-06-2 HCAPLUS

CN 1H-1,2,4-Triazolium, 5-[(4-aminophenyl)azo]-1,4-dimethyl-,  
chloride (9CI) (CA INDEX NAME)

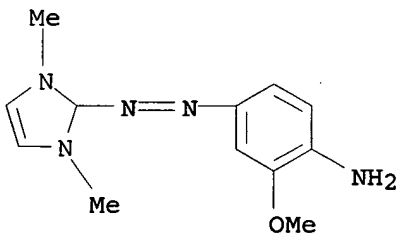


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-07-3 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-3-methoxyphenyl)azo]-1,3-dimethyl-,  
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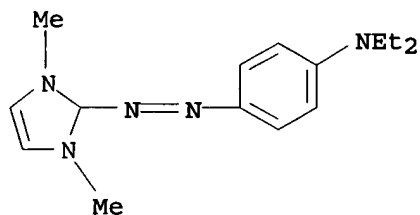


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-08-4 HCAPLUS

CN 1H-Imidazolium, 2-[[4-(diethylamino)phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

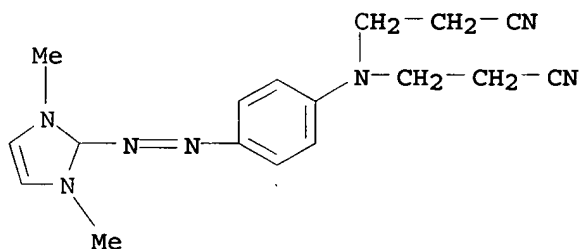


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-09-5 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[bis(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

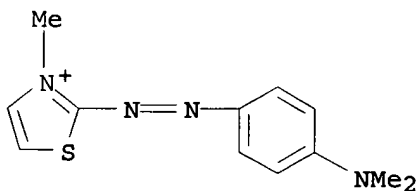


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-15-3 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

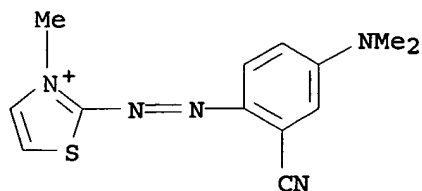


● Cl<sup>-</sup>

RN 161329-16-4 HCAPLUS

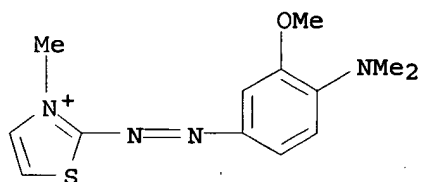
CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3-methyl-,

chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

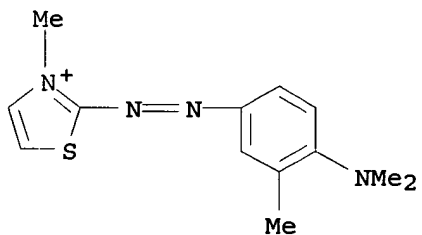
RN 161329-17-5 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)-3-methoxyphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-18-6 HCAPLUS

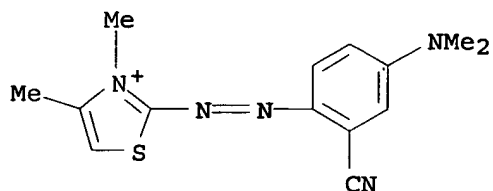
CN Thiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

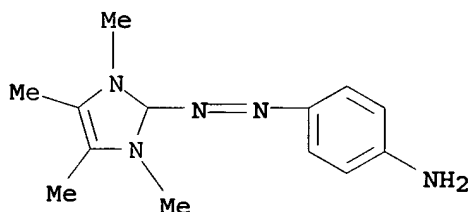
RN 161329-22-2 HCAPLUS

CN Thiazolium, 2-[[2-cyano-4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, chloride (9CI) (CA INDEX NAME)



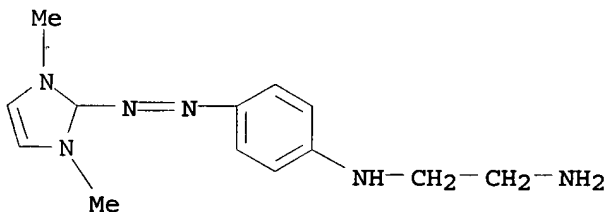
● Cl<sup>-</sup>

RN 161329-23-3 HCAPLUS  
 CN 1H-Imidazolium, 2-[(4-aminophenyl)azo]-1,3,4,5-tetramethyl-,  
 chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

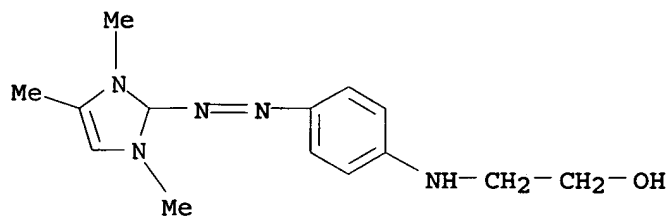
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RN 161329-27-7 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(2-aminoethyl)amino]phenyl]azo]-1,3-  
 dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-28-8 HCAPLUS  
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 trimethyl-, chloride (9CI) (CA INDEX NAME)

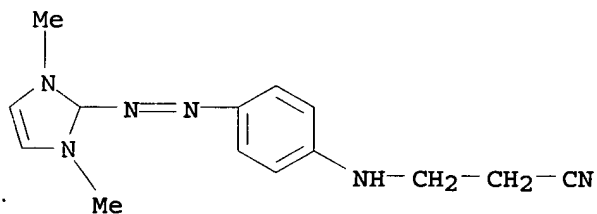


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-29-9 HCAPLUS

CN 1H-Imidazolium, 2-[[4-[(2-cyanoethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

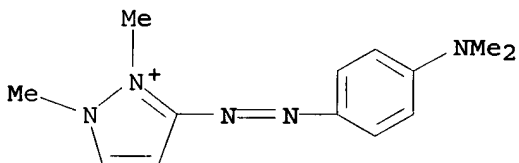


● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-30-2 HCAPLUS

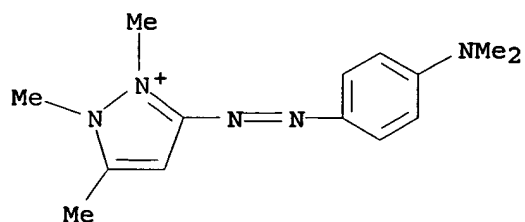
CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 161329-31-3 HCAPLUS

CN 1H-Pyrazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2,5-trimethyl-, chloride (9CI) (CA INDEX NAME)

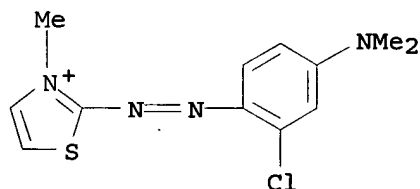


● Cl<sup>-</sup>

RN 161329-35-7 HCAPLUS  
 CN Thiazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-3-methyl-,  
 methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-34-6  
 CMF C12 H14 Cl N4 S



CM 2

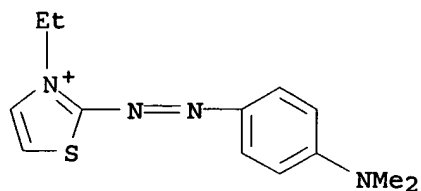
CRN 21228-90-0  
 CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-37-9 HCAPLUS  
 CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-ethyl-, methyl  
 sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-36-8  
 CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

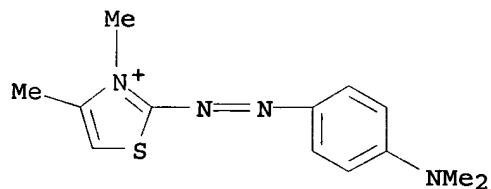
RN 161329-39-1 HCAPLUS

CN Thiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83299-01-8

CMF C13 H17 N4 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

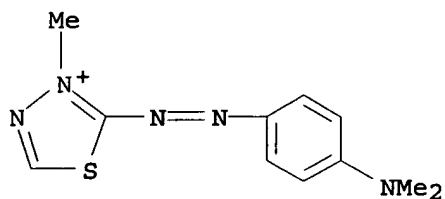
RN 161329-40-4 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 83298-99-1

CMF C11 H14 N5 S



CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

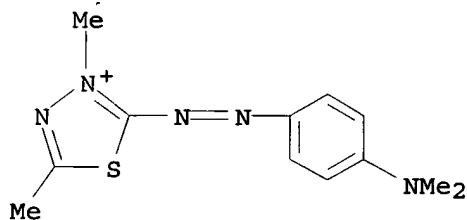
RN 161329-42-6 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3,5-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-41-5

CMF C12 H16 N5 S



CM 2

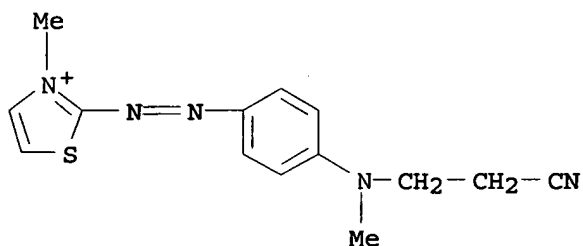
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

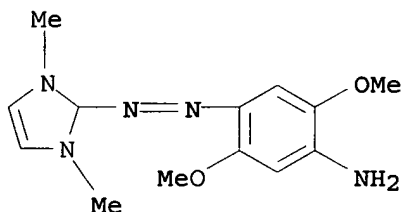
RN 161329-43-7 HCAPLUS

CN Thiazolium, 2-[[4-[(2-cyanoethyl)methylamino]phenyl]azo]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

RN 161329-44-8 HCAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

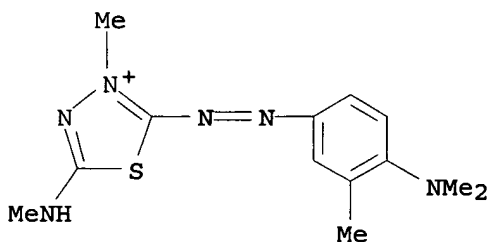
RN 161329-47-1 HCAPLUS

CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)-3-methylphenyl]azo]-3-methyl-5-(methylamino)-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-46-0

CMF C13 H19 N6 S



CM 2

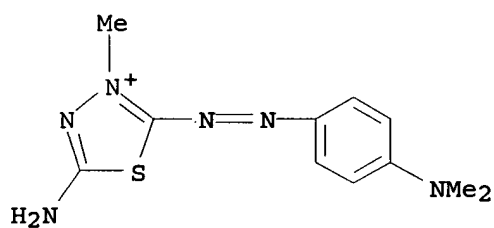
CRN 21228-90-0  
CMF C H3 O4 S

Me-O-SO<sub>3</sub><sup>-</sup>

RN 161329-49-3 HCAPLUS  
CN 1,3,4-Thiadiazolium, 5-amino-2-[[4-(dimethylamino)phenyl]azo]-3-methyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 161329-48-2  
CMF C11 H15 N6 S

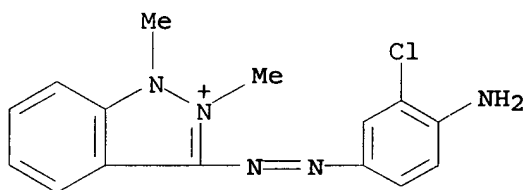


CM 2

CRN 21228-90-0  
CMF C H3 O4 S

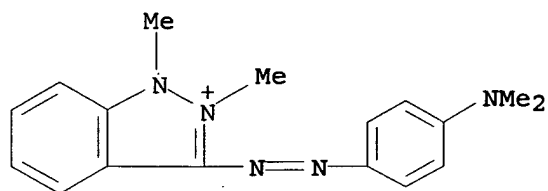
Me-O-SO<sub>3</sub><sup>-</sup>

RN 167382-87-8 HCAPLUS  
CN 1H-Indazolium, 3-[[4-amino-3-chlorophenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



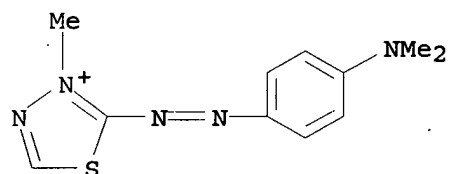
● Cl<sup>-</sup>

RN 167382-88-9 HCAPLUS  
CN 1H-Indazolium, 3-[[4-(dimethylamino)phenyl]azo]-1,2-dimethyl-, chloride (9CI) (CA INDEX NAME)



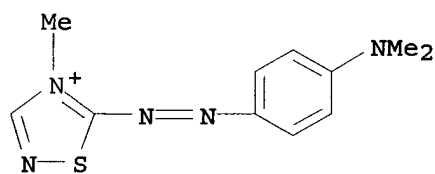
● Cl<sup>-</sup>

RN 167382-97-0 HCAPLUS  
 CN 1,3,4-Thiadiazolium, 2-[[4-(dimethylamino)phenyl]azo]-3-methyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

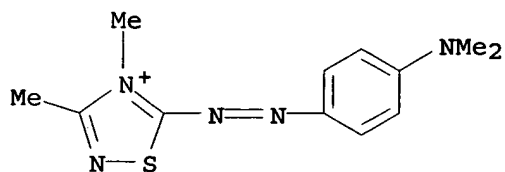
RN 167382-98-1 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-4-methyl-,  
 chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

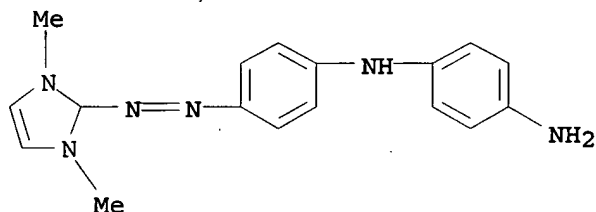
RN 167382-99-2 HCAPLUS  
 CN 1,2,4-Thiadiazolium, 5-[[4-(dimethylamino)phenyl]azo]-3,4-dimethyl-,  
 chloride (9CI) (CA INDEX NAME)





● Cl<sup>-</sup>

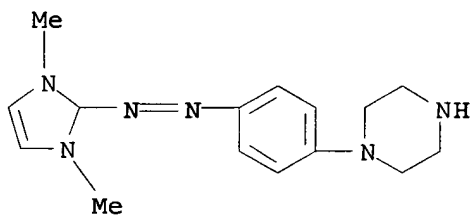
RN 178822-03-2 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-[(4-aminophenyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

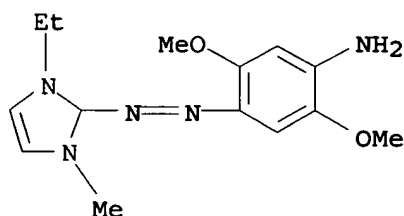
RN 178822-05-4 HCAPLUS  
 CN 1H-Imidazolium, 1,3-dimethyl-2-[[4-(1-piperazinyl)phenyl]azo]-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

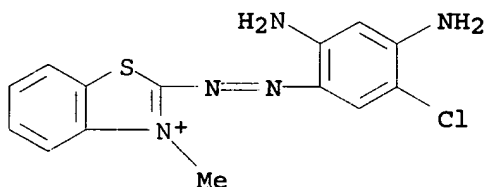
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 254111-15-4 HCAPLUS  
 CN 1H-Imidazolium, 2-[[4-(4-amino-2,5-dimethoxyphenyl)azo]-1-ethyl-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl<sup>-</sup>

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 254111-46-1 HCAPLUS

CN Benzothiazolium, 2-[(2,4-diamino-5-chlorophenyl)azo]-3-methyl-,  
iodide (9CI) (CA INDEX NAME)● I<sup>-</sup>

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

Section cross-reference(s): 38

IT 95-55-6D, derivs. 106-50-3D, 1,4-Benzenediamine, derivs.,  
biological studies 108-45-2D, 1,3-Benzenediamine, derivs.,  
biological studies 123-30-8D, p-Aminophenol, derivs.

591-27-5D, derivs. 6687-56-5 7077-55-6

7267-43-8 7687-09-4 7687-11-8 9004-62-0D,

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52132-13-5 52132-14-6 52132-16-8 52132-17-9 52132-18-0

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52132-25-9 52132-27-1 54940-81-7 59405-36-6

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 178822-03-2 178822-05-4 211050-61-2  
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 251352-47-3 251352-49-5 251352-50-8 254111-15-4  
 254111-41-6 254111-46-1

(hair dye composition containing cationic  
 direct dye and thickening polymer)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L26 ANSWER 52 OF 74 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:788350 HCAPLUS

DOCUMENT NUMBER: 132:26624

TITLE: Hair dye compositions comprising a direct  
 cationic dye and a substantive cationic or  
 amphoteric polymer

INVENTOR(S): Rondeau, Christine

PATENT ASSIGNEE(S): Oreal S. A., Fr.

SOURCE: Fr. Demande, 68 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2776923	A1	19991008	FR 1998-4234	1998 0406
FR 2776923	B1	20030110		
EP 953334	A2	19991103	EP 1999-400711	1999 0323
EP 953334	A3	20000308		
EP 953334	B1	20041020		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 279903	E	20041115	AT 1999-400711	1999